The Effects of an Equine Assisted Learning Supervision Intervention on Counselors'-in-Training Performance Anxiety, Counseling Self-Efficacy, and Supervisory Working Alliance

by

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October 2017

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## ABSTRACT

Due to the complexity of the counseling process, counselors-in-training often experience performance anxiety when entering the counseling profession. Research shows that higher counseling self-efficacy (the belief in oneself to perform counseling skills successfully) helps decrease performance anxiety. Further, a strong supervisory working alliance is the most effective intervention to increase counseling-self-efficacy.

However, there are barriers to building a strong supervisory working alliance including high performance anxiety and low counseling self-efficacy as well as the dual nature of the supervisor's role as mentor and evaluator. This study introduces an equine assisted learning supervision intervention for counselors-in-training. This experiential learning intervention provides an opportunity for counselor self-exploration and growth in a non-evaluative, nonjudgmental, novel situation.

The population of interest was counselors-in-training enrolled in CACREP counseling programs. The purposive sample included 20 students enrolled in a theories counseling course or

a practicum skills course. The study used a quasi-experimental design where participants completed a *Demographic Questionnaire,* the *Counseling Self-Estimate Inventory*, the *State-Trait Anxiety Inventory*, and the *Supervisory Working Alliance-Trainee Form*. Participants were randomly selected to be in a treatment group, which received a one hour individual equine assisted learning supervision intervention or in the control group, which received class as usual. Six research questions examined the main effect of the EAL-S intervention on counseling self-efficacy, the main effect of the EAL-S intervention on performance anxiety, the relationship between counseling self-efficacy and performance anxiety, the correlation of the quality of supervisory working alliance with counseling self-efficacy, the correlation of the quality of the supervisory working alliance with performance anxiety, and the correlation of the supervisory working alliance with the effectiveness of the EAL-S intervention.

A split-plot MANOVA was performed to analyze the first two questions and revealed a significant main effect of the EAL-S intervention on counseling self-efficacy. Non-significance was found in the main effect of the EAL-S intervention on performance anxiety. Pearson Product Moment Correlations were performed for the remaining questions. A significant positive correlation was found between counseling self-efficacy and performance anxiety. No significance was found in the correlation of the quality of the supervisory working alliance with counseling self-efficacy, performance anxiety, or the effectiveness of the EAL-S intervention.

Findings support that a one hour EAL-S intervention can improve counselors'-in-training counseling self-efficacy and improve their tolerance for performance anxiety. These results have implications for counselors-in-training, supervisors, and counselor educators.

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A Dissertation

Presented To

The Faculty of the Department of Addictions and Rehabilitation Studies

East Carolina University

In Partial Fulfillment of the Requirements for the Degree

Ph.D. Rehabilitation Counseling and Administration

by

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October. 2017

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## ACKNOWLEDGEMENTS

Thank you to the army of people who have made this higher education journey a possibility for me. I could never have completed this research without the help of my parents. This journey would not have been as much fun without the unwavering support of my dissertation chair, Dr. Shari Sias, and her ongoing excitement about this research, and also Dr. Stephen Leierer's help with the methodology and statistics. Thank you also to Dr. Leigh Atherton and Dr. Allison Crowe for your contributions and support.

I am eternally grateful for the support of my peers in the doctoral problem, who helped with everything from staying properly caffeinated to babysitting my kids during this whole 3 year process.

This research is extremely important to me not only personally but professionally, and it could not have been accomplished without the support of the forward thinking, innovative Department of Addictions and Rehabilitation Studies at ECU.

I am also thankful for the integral support received from Rocking Horse Ranch horses and staff, especially Malaika Albercht, for making this research possible and for all the future ideas we will explore together.

Finally a special thanks to Christopher and Austin, who kept me grounded through this whole experience and did not let me lose myself in work and study, and always reminded me to believe in anything and everything to make the world a magical place.

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# CHAPTER 1: INTRODUCTION

## Introduction to the Study

This chapter introduces the study examining the effects of an equine assisted learning supervision intervention on counselor-in-training performance anxiety and counseling self-efficacy. This study also examines whether the quality of the counselor-in-training supervisory working alliance correlates with counseling self-efficacy, performance anxiety, or the effectiveness of the intervention. More specifically, this research seeks to answer: (a) How does a one-hour equine assisted learning supervision intervention influence counselors'-in-training counseling self-efficacy? (b) How does a one-hour equine assisted learning supervision intervention influence counselors'-in-training performance anxiety? (c) Is there an interaction between counselors-in-training counseling self-efficacy and performance anxiety? (d) How does the quality of the counselors'-in-training supervisory working alliance correlate with counseling self-efficacy? (e) How does the quality of the counselors'-in-training supervisory working alliance correlate with counselor performance anxiety? (d) How does the quality of the counselors'-in-training supervisory working alliance correlate with the effectiveness of the equine assisted learning supervision intervention?

This chapter also includes the background of the study, the statement of the problem, the justification for the study, the research questions, the significance of the study, the definition of terms, and a summary of the chapter.

## Background of Study

Counseling is a complex process of deciphering human emotions, motivations, and cognitive processes (Meola & Sias, 2016; Skovholt & Ronnestad, 2003). Being an effective counselor requires adapting to this complexity and being comfortable with the ambiguous nature

of the counseling process (Levitt & Jacques, 2011). Counselors-in-training are often anxious and overwhelmed by the complexity of direct client work (Daniels & Larson, 2001; Schwing, LaFollette, Steinfeldt, & Wong, 2011). Some performance anxiety leads to an increase in counseling performance, but as performance anxiety grows, it becomes a barrier to positive performance (Larson, 1998; Larson & Daniels, 1998).

**Counselors-in-Training and Performance Anxiety**

Performance anxiety is a common theme when counselors-in-training discuss their initial experiences counseling clients (Bernard & Goodyear, 2014; Schwing, et al., 2011). Performance anxiety is defined as "strong but delimited fears that severely compromise an individual's capacity to execute a task at a level that could be reasonably expected, which is crucial to that person's normal adjustment" (Powell, 2004, p. 804). Since the counseling profession is dealing with the complexity of human emotions and motivations, competency in counseling takes years of practice. Counselors-in-training who do not expect this complexity often experience overwhelming performance anxiety. They fear not having the "right answers" for clients (Skovholt & Ronnestad, 2003). Anxiety over performance causes counselors-in-training to focus inward as they worry about how they should react to what clients are saying instead of being in the present moment with clients.

Difficulty staying in the moment can lead to problems in forming empathetic therapeutic relationships with clients and in conceptualizing what occurs in sessions (Bernard & Goodyear, 2014; Schwing, et al., 2011). Such internal focus can inhibit counselors-in-training from truly connecting with clients and appearing genuine in their responses. Performance anxiety can also halt counselors'-in-training processes of deciding how to react in specific situations, which negatively impacts their counseling self-efficacy (Skovholt & Ronnestad, 2003).

## Counselors-in-Training and Counseling Self-Efficacy

Counseling self-efficacy is the belief in one's ability to perform counseling skills and actions in the near future (Barnes, 2004; Daniels & Larson, 2001; Larson, 1998). Counseling self-efficacy effects the way counselors-in-training manage performance anxiety, try new tasks in counseling, respond to challenging situations, and evaluate their counseling experiences (Barnes, 2004). Further, counseling self-efficacy is often at its lowest when counselors-in-training begin the practicum course and see clients for the first time (Daniels & Larson, 2001).

Counselors-in-training with high counseling self-efficacy are more effective with clients as compared to their counterparts with low counseling self-efficacy (Larson, 1998). For example, counselors-in-training with high counseling self-efficacy view performance anxiety as a challenge and are willing to try new techniques and explore challenging situations with clients. Counselors-in-training with low counseling self-efficacy view performance anxiety as an obstacle to avoid, thus limiting their risk- taking behaviors (i.e., trying new skills or working with new populations).

High counseling self-efficacy contributes to the building of strong therapeutic bonds and boundaries with clients. Schwing and colleagues (2011) found that counselors-in-training struggle to set appropriate emotional boundaries with clients. Some counselors-in-training had boundaries that were too rigid, while others were too flexible. Counselors-in-training who are guarded and have rigid emotional boundaries tend to have difficulty developing empathy and seeing situations from their clients' point of view (Schwing et al., 2011; Skovholt & Ronnestad, 2003). These counselors-in-training come across as uncaring and judgmental, which leads to reduced client sharing. Counselors-in-training who are too emotional with clients or lack

sufficient boundaries may have trouble keeping relationships with clients strictly professional (Schwing et al., 2011). This can lead to burnout as too much emotional energy is put into these client-counselor relationships (Skovholt & Ronnestad, 2003).

Skovholt and Ronnestad (2003) discuss how developing appropriate emotional boundaries with clients is a career-long process, and developing these skills through self-monitoring and supervision is key. Learning to identify with clients while keeping one's self and one's emotions safe takes years of practice (Schwing, et al., 2011). Identifying, discussing, and normalizing the struggle to establish appropriate emotional boundaries with clients aids in counselor-in-training development (Guiffrida, Jordan, Saiz & Barnes, 2007). As counselors-in-training experience an increase in counseling self-efficacy, they will experience an increase in their ability to form successful therapeutic alliances with clients.

## Counselors-in-Training and Skill Development

This section presents ways to decrease counselors-in-training performance anxiety and increase counseling self-efficacy.

**Supervision.** Clinical supervision is critical when assisting counselors-in-training in developing skills to decrease performance anxiety and increase counseling self-efficacy (Barnes, 2004; Bernard & Goodyear, 2014; Cashwell & Dooley, 2001). Quality supervision produces more effective counselors (Bernard & Goodyear, 2014; Larson, 1998). The value or quality of supervision is often measured by the supervisory working alliance, which is defined as the interactions between supervisors and supervisees that assist with the development of supervisees (Efstation, Patton, & Kardash, 1990). A positive supervisory working alliance is one where counselors-in-training and supervisors agree on supervision and counseling goals, supervision and clinical tasks, and have established an affective bond (Bernard & Goodyear, 2014).

Outcomes of a positive supervisory working alliance include supervisee disclosure of fears and weaknesses, openness about challenges in counseling, strong client-counselor therapeutic working alliances and improved client care (Bernard & Goodyear, 2014). However, high performance anxiety and low counseling self-efficacy in counselors-in-training can be barriers to forming an effective supervisory working alliance (Bernard & Goodyear, 2014). This is partly due to the evaluative nature of supervision and the competitive, grade-oriented nature of graduate school/students. Adding experiential learning opportunities in and outside of the classroom may help overcome these barriers by creating opportunities for counselors-in-training to practice counseling skills and increase self-awareness without a grade attached to the process.

**Experiential learning and equine assisted learning.** Experiential learning is "the process whereby knowledge is created through the transformation of experience" (Kolb 1984, p. 41). During the 1960's, research focused on integration of didactic supervision and experiential learning (Truax, Carkhuff, & Douds, 1964). The primary reason for including experiential learning in supervision was experiential learning-stimulated self-exploration and growth, which was critical for counselors-in-training (Truax et al., 1964). More recently, experiential learning is used when teaching multicultural counseling (Arthur & Achenbach, 2002; Villiba & Redmond, 2008), career counseling (Fulton & Gonzalez, 2015), and counseling research courses to enhance a counselor's ability to translate this knowledge into client interactions (Rehfuss & Meyer, 2012).

Currently, the Council for Accreditation of Counseling and Related Programs (CACREP) standards requires students to participate in at least 10 hours of experiential group work in a small group setting (CACREP, 2016). This experiential class involves participation in a personal growth group. Participation in experiential/growth groups increases self-awareness, awareness of

others, and insight into areas of growth (e.g., personal weaknesses) (Ohrt, Prochenko, Stulmaker, Huffman, Fernando, & Swan, 2014).

Equine assisted learning (EAL) and equine facilitated psychotherapy (EFP) are experiential learning interventions that have the potential for increasing counselors'-in-training self-awareness, provide opportunities for growth, and increase awareness of personal strengths and weaknesses. Equine assisted learning facilitates personal and professional development of life skills through interactions with equines (Professional Association of Therapeutic Riding, International [PATH], 2016c). According to PATH (2016d), "In an EAL setting, the experiential approach integrates horse-human interaction that is guided by a planned learning experience to meet the identified goals or desires of the participant(s)" (paragraph 2). An EAL session involves participants, horses, a facilitator, and sometimes an equine specialist and horse handler volunteers.

The role of equines (horses), is to reflect participants' actions and to provide immediate feedback (behavioral reactions) on how participants' presence is perceived by the equines (PATH, 2016d). Feedback is based solely on the participants' actions in the moment and has a nonjudgmental aspect that is lacking in human-to-human interactions (Chandler, 2016; Strozzi, 2004). This authentic experience of being seen by and creating a connection with the horse can facilitate the forming of genuine human-to-human relationships such as a counselor-client relationship (Chandler, 2016).

The role of the equine assisted learning facilitator is to translate the feedback (i.e., behavioral reactions) of the equines for participants and assist participants in applying what they have learned from the equine interactions to real-life situations (e.g., communication styles, relationship building, habits) (PATH, 2016e; Strozzi, 2004). Facilitators are usually mental

health professionals, educators, or life coaches. The translating of the equine interactions is typically done by asking participants open-ended questions such as "What did the horse teach you about your communication skills today?" or "How can you relate what the horse just taught you about how you approach others people in your life?"

The second equine assisted therapy is equine facilitated psychotherapy (EFP). Equine facilitated psychotherapy is "an interactive process in which a licensed mental health professional working with or as an appropriately credentialed equine professional, partners with suitable equine(s) to address psychotherapy goals set forth by the mental health professional and the client" (PATH, 2016d, par. 4). The primary differences between EAL and EFP are: (a) facilitators of EAL are not limited to mental health professionals, whereas, facilitators of EFP are mental health professionals and (b) the goals of EAL are life skills development, whereas, the goals of EFP are therapeutically driven.

National and international accreditation bodies have set safety standards, protocols, and training guidelines for professionals in the field of equine assisted activities and therapies (EAAT) (Hallberg, 2008). The establishment of accrediting bodies has led to standardization of facilitator training and definition of scope of practice (Hallberg, 2008). However, the accrediting bodies have yet to form a consensus on safety standards and names of therapeutic activities (e.g., equine facilitated psychotherapy as defined by PATH; International and equine assisted psychotherapy, as defined by Equine Assisted Growth and Learning Association (EAGALA) (Lee, Dakin, & McLure, 2016). Other terms found in the literature include: equine assisted learning (EAL), equine assisted counseling (EAC), equine assisted therapy (EAT), horse assisted therapy (HAT) and equine assisted activities and therapies (EAAT) (Earles, Vernon & Yetz, 2015; Kern-Godal, Brenna, Arnevik & Ravndal, 2016; Lee et al., 2016; Sudekum Trotter et al.,

2008). For the purpose of this study all equine therapeutic activities will be referred to as equine-assisted activities and therapies (EAAT).

Equine assisted activities and therapies prove useful with various concerns in clinical populations (e.g., low self-esteem, low self-efficacy, and high anxiety) (Lentini & Knox, 2015; Sudekum Trotter, Chandler, Goodwin-Bond & Casey, 2008). Studies show effectiveness of EAL interventions with helping professionals (Dyk, Cheung, Pohl, Noriega, Lindgreen, & Hayden, 2013). Furthermore, case studies suggest that animal assisted supervision (with a dog) enhanced the effectiveness of supervision of counselors-in-training (Chandler, 2016; Stewart, Bach-Gorman, Harris, Crews, and Chang, 2013). The current study explored the effectiveness of EAL in increasing counseling self-efficacy and decreasing performance anxiety in counselors-in-training. Further, the experiential nature of learning that EAL provides aligns with CACREP standards for experiential learning in counselor education programs.

## Statement of the Problem

Counselors-in-training who experience higher levels of performance anxiety are likely to have lower than average supervisory working alliances (Bernard & Goodyear, 2014). Much of counselors'-in-training performance anxiety is due to the new experience of counseling clients, the evaluative nature of supervision, and the dual role of the supervisor (mentor and evaluator) (Schwing et al., 2011; Skovholt & Ronnestad, 2003). As mentors, supervisors are models for how counselors-in-training interact with clients. As evaluators, supervisors point out counselor-in-training strengths and areas for growth. Discussions surrounding counselors-in-training areas for growth may cause spikes in performance anxiety, as well as feelings of guilt and shame that may create barriers in the supervisory working alliance (Bernard & Goodyear, 2014). This study

suggested an alternative to traditional supervision, which was the inclusion of equine assisted learning supervision interventions with counselors-in-training.

## Justification and Purpose of the Study

Addressing counselor-in-training performance anxiety and its impact on counseling self-efficacy is crucial to the development of effective counselors. Experiential learning is a suggested means of counselor growth and development (CACREP, 2016). Previous research has focused on counselor-in-training interpretation of performance anxiety and how performance anxiety is related to counseling self-efficacy. However, research on measurable performance anxiety is lacking (Larson 1998). The current research examined the effects of an equine assisted learning supervision intervention on counselor-in-training counseling self-efficacy and performance anxiety. More specifically, this research sought to answer: (a) Does participation in a one-day, equine assisted learning supervision intervention increase counselors-in-training counseling self-efficacy, as measured by the *Counseling Self Estimate Inventory* (Larson, 1998), and decrease performance anxiety as measured by the *State-Trait Anxiety Inventory* (Spielberger, Gorsuch, Lushene, Vagg, & Jacobs, 1983), (b) Does the quality of the counselor-in-training supervisory working alliance, as measured by the *Supervisory Working Alliance Inventory* correlate with counseling self-efficacy and performance anxiety, and (c) How does the quality of the supervisory working alliance correlate with the effectiveness of the treatment on counselor self-efficacy and performance anxiety?

Demonstrated effectiveness of equine-assisted activities and therapies (EAAT) is essential for participants (e.g., counselors-in-training, clinical populations) and stakeholders (e.g., counseling supervisors and educators, guardians, parents). Quality research is also important for granting agencies to support EAAT programs. Finally, increasing the number of

randomized clinical trials testing the effectiveness of EAAT is essential for the field to earn legitimacy in the medical community, support insurance reimbursement, and be viewed as a viable therapeutic and educational option for identified populations (Berg & Causey, 2014).

## Theoretical Rationale

The Social Cognitive Model of Counselor Training (SCMCT) is the theoretical underpinning for the current study. The SCMCT is based on Bandura's (1986) social cognitive theory and utilizes the supervisory working alliance to increase counseling self-efficacy (Larson, 1998). Social cognitive theory suggests that people have control over their thoughts, actions, and motives as well as the ability to change these processes through self-determination.

The following are basic tenets of the SCMCT:

1. Counseling self-efficacy is "the primary causal determinate of effective action" in counseling (Larson, 1998, p. 226).
2. A positive supervisory working alliance creates a safe place for counselors-in-training to develop counseling self-efficacy.
3. The level of counseling self-efficacy impacts counselors-in-training in-session responses, risk taking behaviors, and persistence in spite of failing. The higher the counseling self-efficacy the better the counselor-in-training reads and flexes to client needs.
4. Individuals with higher counseling self-efficacy interpret their anxiety as a challenge and are more likely to set attainable goals in counseling and supervision (Larson 1998).
5. Bandura's (1989) triadic reciprocal causation occurs when counselors-in-training are learning to counsel clients and interacting with supervisors.
6. The social cognitive theory constructs of mastery, modeling, social persuasion, and affective arousal can increase counseling self-efficacy (Bandura, 1986).

Each of the SCMCT tenets and their application to the current study are discussed in detail in chapter two.

## Research Questions

The research questions in this study are:

1. How does a one-hour equine assisted learning supervision intervention influence counselors'-in-training counseling self-efficacy as measured by the *Counseling Self Estimate Inventory*?
2. How does a one-hour equine assisted learning supervision intervention influence counselors'-in-training performance anxiety as measured by the *State-Trait Anxiety Inventory* (State scale only)?
3. What is the relationship between counselor-in-training counseling self-efficacy, as measured by the *Counseling Self Estimate Inventory*, and counselor-in-training performance anxiety, as measured by the *State-Trait Anxiety Inventory* (State scale only)?
4. What is the relationship between the quality of the counselor-in-training supervisory working alliance, as measured by the *Supervisory Working Alliance Inventory-Trainee*, and counselor-in-training counseling self-efficacy?
5. What is the relationship between the quality of the counselor-in-training supervisory working alliance, as measured by the *Supervisory Working Alliance Inventory-Trainee*, and counselor-in-training performance anxiety?
6. What is the relationship between the quality of the counselor-in-training supervisory working alliance, as measured by the *Supervisory Working Alliance Inventory-Trainee*, and the effectiveness of the equine assisted learning supervision intervention?

## Definition of Terms

*Counselor-in-training:* Refers to master's level counseling students who are currently enrolled in pre-practicum, practicum, and internship classes.

*Counseling self-efficacy:* Refers to "one's beliefs or judgments about her or his capabilities to effectively counsel a client in the near future" (Larson & Daniels, 1998, p. 180).

*Performance anxiety:* Refers to a "strong but delimited fears that severely compromise an individual's capacity to execute a task at a level that could be reasonably expected, which is crucial to that person's normal adjustment" (Powell, 2004, p. 804).

*Supervision:* Refers to "a process in which an experienced professional holding appropriate preparation, degree, licensure and/or certification provides consistent support, instruction, and feedback to a counselor-in-training, fostering his or her personal (psychological), professional and skill development while evaluating his or her delivery of ethical services" (Lambie & Sias, 2009, p. 350).

*Supervisory working alliance:* Refers to the set of actions interactively used by supervisors and trainees to facilitate the learning of the trainee (Efstation, Patton, & Kardash, 1990)

*Experiential learning:* Refers to "the process whereby knowledge is created through the transformation of experience" (Kolb 1984, p. 41).

*Equine:* Refers to any member of the horse family.

*Equine assisted learning*: Refers to "…an experiential learning approach that promotes the development of life skills for educational, professional and personal goals through equine-assisted activities" (PATH, 2016a, paragraph 3).

*Equine assisted learning supervision intervention:* Refers to an equine assisted learning intervention geared toward counselor development.

*Equine facilitated psychotherapy:* Refers to the "… interactive process in which a licensed mental health professional working with or as an appropriately credentialed equine professional, partners with suitable equine(s) to address psychotherapy goals set forth by the mental health professional and the client" (PATH, 2016c, paragraph 4).

*Human facilitator*: Refers to "a person with specific training and skills to help groups and individuals bring about an outcome (such as learning, growth, or communication) by providing indirect or unobtrusive assistance, guidance, or supervision through an experiential learning environment" (PATH, 2016e, p.2).

*Equine professional or specialist:* Refers to "a professional who satisfies the equine knowledge and skills as outline in the EAL competencies" (PATH, 2016e, p.2).

*Professional Association of Therapeutic Riding, International* (PATH): Refers to the organization "founded in 1969 as the North American Riding for the Handicapped Association (NARHA) to promote safe and effective therapeutic horseback riding throughout the United States and Canada (paragraph 3)" whose position is that of a global authority, resource and advocate for equine-assisted activities and therapies and the equines in this work that inspire and enrich the human spirit." (PATH, 2016b, paragraph 2).

*Prepracticum:* A master's level counseling course which includes, "in class practice of counseling skills and techniques, assessment practices, treatment/rehabilitation plans, professional issues, standards, and ethics (East Carolina University Graduate Course Catalog, 2016-2017).

*Practicum:* A master's level counseling course which includes, "counseling clients with mental health addictions, adjustment to disability, educational and/or career planning (East Carolina University Graduate Course Catalog, 2016-2017)

*Internship:* A master's level counseling course which included, "field-site placement in a professional clinical mental health, addictions, [school] and/or rehabilitation counseling program during the student's last semester (East Carolina University Graduate Course Catalog, 2016-2017).

## Chapter Summary

Supervision and a positive supervisory working alliance are critical to the development of counselors-in-training. However, there are barriers to positive supervisory working alliances (e.g., evaluative nature of supervision). Equine assisted learning supervision (EAL-S) is an experiential learning intervention that can address the barriers counselors-in-training face in supervision. To date, there are no published studies exploring the use of EAL-S with counselors-in-training. The current research explored the effects of adding a one-day, equine assisted learning supervision intervention into theories-based and skills-based curriculum to enhance the development of counselors-in-training.

# CHAPTER 2: LITERATURE REVIEW

## Introduction to the Chapter

In the previous chapter, issues counselors-in-training face in supervision were discussed. These issues included the impact of: (a) a positive supervisory working alliance, (b) the evaluative nature of supervision and (c) high performance anxiety and low counseling-self-efficacy in counselors-in-training on learning. Additionally, the previous chapter introduced an equine assisted learning supervision intervention (EAL-S) as an experiential learning opportunity for counselors-in-training. Further, the CACREP standards which support the use of experiential learning, such as EAL programs, were introduced. The social cognitive model of counselor training (SCMCT) was presented as a theoretical underpinning for using equine assisted learning supervision interventions with counselors-in-training.

Chapter two contains an extensive literature review of: (a) counselor-in-training performance anxiety and counseling self-efficacy, (b) the social cognitive theory and Larson's (1998) social cognitive model of counselor training (SCMCT), and (c) the application of social cognitive theory/SCMCT to equine assisted learning supervision for counselors-in-training.

## Relationship of Performance Anxiety and Counseling Self-Efficacy in Counselors-in-Training

Anxiety over performance and counseling self-efficacy are linked in the counseling literature (Barnes, 2004; Cashwell & Dooley, 2001; Daniels & Larson, 2001; Larson, 1998). As discussed in chapter one, performance anxiety is experienced by most counselors-in-training. Counselors-in-training with higher counseling self-efficacy, experience performance anxiety as a challenge and set realistic, yet motivating goals for themselves when interacting with clients. Additionally, higher counseling self-efficacy is linked to lower rates of emotional exhaustion and

depersonalization (Larson 1992). Counselors-in-training with lower counseling self-efficacy, experience performance anxiety as a barrier to interacting with clients, dismiss important client cues and overly focus on non-important client cues, have unclear goals, put less effort into developing their counseling skills and experience higher rates of emotional exhaustion and depersonalization (Kozina, Grabovari, Stefano & Drapeau, 2010; Larson 1992; 1998).

In a perfect scenario, counselor-in-training counseling self-efficacy would be slightly higher than their counseling skills and tasks. More specifically, counselors-in-training would encounter counseling tasks that are challenging but achievable and produce moderate performance anxiety (Larson, 1998). Additionally, they would regard critical feedback as necessary for improvement, view performance anxiety as a challenge rather than an obstacle, and see positive outcomes in clients (Larson, 1998).

As previously discussed, during counseling lab work and field-placements, counselors-in-training typically experience higher levels of performance anxiety due to the non-linear, complex nature of the counseling process (Skovholt & Ronnestad, 2003). During pre-practicum, counselors-in-training are learning and practicing individual counseling skills with peers. However, practicum is the first-time counselors-in-training are transferring classroom knowledge and skills to counseling actual clients (Counsel for the Accreditation of Counseling and Related Educational Programs [CACREP], 2014). Therefore, the primary focus of practicum is increasing counselors'-in-training knowledge and practical application of micro-skills in counseling (Kozina et al., 2010). This is typically done through in-class role play demonstrations and face-to-face interactions with clients at practicum field-placements (Kozina et al., 2010; Prieto, 1998).

Throughout practicum, counselors-in-training typically meet for one-hour of weekly individual or triadic supervision with a faculty supervisor (or a doctoral student who is under the supervision of faculty) and for 1.5 or more hours of group supervision (CACREP, 2016). Supervision is defined as "a process in which an experienced professional holding appropriate preparation, degree, licensure and/or certification provides consistent support, instruction, and feedback to a counselor-in-training, fostering his or her personal (psychological), professional and skill development while evaluating his or her delivery of ethical services" (Lambie & Sias, 2009, p. 350).

During supervision, supervisors model how to form working relationships and create a safe place to introduce interventions, which helps practicum and internship supervisees address difficulties experienced during counseling (Bernard & Goodyear, 2014). However, due to the evaluative nature of supervision (e.g., fear of receiving a poor grade) and the performance anxiety of practicum students (e.g., "Am I going to be an effective counselor?"), critical issues may not be fully addressed (Schwing et al., 2011; Skovholt & Ronnestad, 2003). Thus, counselors-in-training may focus on skills they feel confident performing instead of trying new skills based on the individual needs of clients. Furthermore, counselors-in-training may not increase their counseling skills and counseling self-efficacy if they do not trust the supervisory relationship (Marmarosh et al., 2013).

Schwing, LaFollette, Steinfeldt and Wong's (2011) qualitative study ($n$ = 3) examined how novice counselors (i.e., master's practicum students) conceptualized the supervision experience and their awareness of their involvement and interpersonal reactions to clients. The research questions were: (a) How do novice counselors conceptualize the therapeutic relationship? (b) To what extent do novice counselors' conceptualizations of therapeutic

relationships differ from their conceptualizations of outside helping relationships? (c) To what extent do novice counselors' conceptualization of therapeutic relationships involve awareness of their interpersonal reactions to clients? (d) To what extent is discussion of the therapeutic relationship in sessions seen by novice counselors as an intervention? and (e) To what extent does counselors' current training and supervision experience support their development in therapeutic relationships.

Data collection included semi-structured interviews with guided questions and participant diaries. Thematic analysis was performed with both the participant interview transcriptions and diaries. Findings indicated that a positive working alliance was the strongest predictor of successful counseling and supervision outcomes. Further, being able to form a strong working alliance was a core challenge for participants due to high levels of anxiety. Counselor anxiety triggers defense mechanisms, boundary issues, and increases self-focus, thus reducing the quality of the working alliance. Schwing et al. (2011) also found that self-awareness was integral to regulating anxiety and using anxiety as a challenge instead of an obstacle. One limitation of this study was the possible biases of the interviewers, who were counselor educators who believe supervision is important for self-awareness and professional growth. Another limitation was the authors' use of a sample of convenience. Participants included the first three students to volunteer for the study, which may not be representative of all master's students. Despite these limitations, Schwing et al. (2011) findings support the importance of a positive supervisory working alliance for successful counseling and supervision outcomes, that obtaining a positive working alliance is a challenge for counselors-in-training with high levels of anxiety and that self-awareness regulated counselor-in-training anxiety.

Another study by Marmarosh et al. (2013) explored how the adult romantic attachment style of 57 novice therapists related to their attachment to their supervisor and the supervisory working alliance. Marmarosh and colleagues (2013) also explored how supervisees' adult attachment and supervisory attachment were related to their counseling self-efficacy. Participants were second year counselors-in-training in a psychology practicum. Participants received individual weekly supervision for at least three months prior to the study. Participants were 46 females and 11 males. Of these, 3 were African American, 2 were Asian American, and the remaining 49 were Caucasian. The average participant age was 27 years.

Researchers used the *Working Alliance Inventory-Short Form* (*WAI-SF*) to measure "client therapist agreement on goals, agreement on tasks, and bond" (Marmarosh et al., 2013, p. 181). The Cronbach's alpha score for the WAI-SF is 0.94. Another assessment used was the *Experiences in Close Relationship Scale (ECRS),* which explored the participants' interpersonal attachments. The Cronbach's alpha scores for the *ECRS* ranged from 0.91 to 0.94. Since there was no instrument that assessed therapist attachment to supervisor, the *Therapist Attachment to Supervisor Scale* (*TASS*) was created by revising the *Client Attachment to Therapist Scale (CATS)* (Marmarosh et al., 2013). The *TASS* was reworded to provide insight into the therapist-supervisor relationship and to allow participants to receive scores for "secure, preoccupied, and fearful attachment patterns with their supervisors" (Marmarosh et al., 2013, p. 181). Cronbach's alphas on the *TASS* were 0.73 for secure, 0.77 for avoidant-fearful, and 0.72 for preoccupied-merger". The *Counselor Self-Estimate Inventory (COSE*) was the final assessment used to explore participants' level of counseling self-efficacy. The *COSE* is a 37-item self-report inventory that measures one's belief in his/her ability to perform counseling activities successfully in the near future (Larson et al., 1992). Cronbach's alpha for the *COSE* was 0.87

and construct validity is high in multiple tests (Larson et al., 1992). Although the *COSE* has five subscales, the overall score is the recommended indicator of counseling self-efficacy (Daniels & Larson, 2001; Larson, 1992).

Results indicated that counselor-in-training attachment styles correlate significantly with counseling self-efficacy and level of satisfaction with the supervisory working alliance. Specifically, fearful avoidance in supervision negatively impacted the supervisory working alliance, and adult attachment avoidance and alliance were negatively correlated with counseling self-efficacy. More specifically, counselors-in-training who were more anxious rated themselves "less self-aware, more dependent, and less motivated than the average student" (Marmarosh et al., 2013, p. 184). Counselor-in-training perceptions of the supervisory working alliance were the most highly correlated factor with counseling self-efficacy. Limitations to this study include: (a) the use of overlapping constructs in assessments may have caused the data to appear significant when it was not, (b) the use of non-validated assessments on supervisory attachment, (c) the small sample and (d) the use of only the novice therapists' views (supervisors' views were not included).

The type of supervisory feedback (positive versus negative) given to counselors-in-training also effects their performance anxiety and counseling self-efficacy. Daniels and Larson (2001) studied the effect of bogus feedback on the performance of counselors-in-training during mock counseling sessions. Participants were 45 master's counseling students at a Midwestern University. Participants completed a ten-minute mock counseling session and received either positive or negative bogus (i.e., feedback that did not correlate with their performance) feedback. To determine the impact of supervisory feedback, participant levels of performance anxiety and counseling-self efficacy were measured before and after the bogus feedback.

The *State-Trait Anxiety Inventory* (*STAI*) was used to measure performance anxiety level (Spielberger, et al., 1983). State anxiety is defined as an emotional reaction to a specific situation and trait anxiety as the personal characteristics of how one handles stress. The *STAI* is a 40-item inventory with two subscales; 20 questions on state anxiety and 20 questions on trait anxiety. Higher scores represent increased levels of anxiety. Daniels and Larson (2001) explored participants' state anxiety only.

The *Counseling Self-Estimate Inventory* (*COSE*) was used to measure counseling self-efficacy. Participants were also asked to rate their performance in counseling sessions on a scale of 1 (*I really blew it*) to 9 (*I did great*) before and after receiving bogus performance feedback.

A repeated measures ANOVA was used to analyze the data and found that participants were adjusting their performance evaluations after receiving feedback ($F$ [1, 43] = 4.62, $p < 0.05$). Participant anxiety had a significant interaction with performance feedback pre- and post-test ($F$ [1, 43] = 26.94, $p < 0.001$). Participant level of counseling self-efficacy had a significant interaction with performance feedback pre- and post-test ($F$ [1, 43] = 20.78, $p < 0.001$). Results showed that participants' level of anxiety and counseling self-efficacy were directly impacted by the supervisory feedback received. When a counseling student performed well but received negative bogus feedback, their counseling self-efficacy decreased. When a student performed poorly but received positive feedback, their counseling self-efficacy increased. Limitations of this study include the mock sessions were not real counseling sessions and the feedback was more exaggerated than typical supervisor feedback, which some participants noted. Despite these limitations, the findings speak to the importance of supervisory feedback and its effect on counselors-in-training counseling self-efficacy.

Mullen, Uwamahoro, Blount, and Lambie (2015) performed a longitudinal study measuring the influence of a counselor training program on students' level of counseling self-efficacy. Participants included 179 master's level counselors-in-training from a single CACREP master's counseling program. Participants were 151 females and 28 males, whose ages ranged from 20 to 50+. One hundred and thirty-three ($n$ = 130) were Caucasian, 36 were African American, 7 were Hispanic, 1 was Asian American, and 2 identified as other. Seventy-eight participants were in the Mental Health Counseling program, 46 were in the Marriage, Couples, and Family Counseling program, and 55 were in the School Counseling program. Participants were given the *Counselor Self-Efficacy Scale* (*CSES*), an assessment of counseling self-efficacy (Melchert, Hays, Wiljanen & Kolocek, 1996, as cited in Mullen, et al., 2015). The *CSES* has a Cronbach's alpha range of 0.85 to 0.93, test-retest reliability of 0.85, and strong convergent validity scores (Mullen et al., 2015).

The *CSES* was administered to participants at three points during their clinical training program (i.e., orientation, beginning of clinical practicum, the end of internship). Findings showed an increase in counseling self-efficacy as counselors-in-training progressed through the program. More specifically, 69% of the variance in *CSES* scores was accounted for by the length of time participants were enrolled in the program. Median scores increased at each time the *CSES* was administered. This indicates that learning and teaching interventions do influence counselor-in-training levels of counseling self-efficacy. Limitations of this study include: (a) the use of a convenience sample from one university program, (b) one assessment was repeatedly given to participants, which may increase their familiarity with the test, and (c) participant attrition (79.91% response rate).

Cashwell and Dooley (2001) studied the influence of supervision on counseling self-efficacy. The *Counseling Self Estimate Inventory* (*COSE)* was used to assess counseling self-efficacy of professional counselors in a community agency and doctoral students in a university counseling lab. The sample included 33 participants, 25 females and 8 males, ages ranged from 23 to 54 years, and the racial representation was 28 Caucasian Americans and 5 African American. Twenty-two ($n$ = 22) of the participants were receiving clinical supervision, and 11 were not receiving clinical supervision. The study found that counselors receiving supervision reported higher counseling self-efficacy, higher self-concepts, and lower state and trait anxiety. This study was limited by a small sample size, but the findings show evidence of a relationship between receiving supervision and higher levels of counseling self-efficacy.

Kozina and colleagues (2010) studied the impact of counselor training and supervision on counseling self-efficacy and self-perceived skill development of 20 master's counseling psychology practicum students. Participants included 16 females and 4 males of Anglo-American descent. Their age range was 23 to 45 years. The *Counseling Self Estimate Inventory* (*COSE*) measured participants' skill development in the follow areas: (a) micro skills, (b) process, (c) handling difficult client behaviors, (d) cultural competence, and (g) awareness of values.

Prior to the first administration of the *COSE*, participants received 39 hours of practicum instruction and group supervision. Prior to the second administration, participants received an additional 24 hours of practicum instruction and group supervision as well as 30 hours of direct client contact. The results showed that 75% ($n$ = 15) of the participants experienced an increase in counseling self-efficacy while 25% ($n$ = 5) experienced a decrease. A paired 2-tailed $t$-test was run to test for significant differences between participants' *COSE* scores (first versus second

administration). Participants' scores were significantly higher at the second administration (2 [t (19) = 2.36, $p$ = .03]). However, the effect size was small (Cohen's d = .35).

As for self-perceived skill development, participants showed a significant increase in micro skills but not in handling difficult client behaviors, process, cultural competence, or awareness of values. Kozina and colleagues (2010) cite several limitations: (a) small sample, (b) measurement issues (i.e., the areas measured on the *COSE* may not reflect the actual knowledge of novice counselors and the areas measured lack equal representation of items on the *COSE*). Despite these limitations, Kozina and colleagues (2010) findings suggest that counseling self-efficacy and micro skill development is increased through counseling training, and they call for further research with increased sample size and increased points of measurement.

Performance anxiety and counseling self-efficacy are related to counselor effectiveness, and one of the most useful interventions in increasing counseling self-efficacy is supervision. Larson (1998) proposed a model of supervision for counselors-in-training that focuses on increasing counseling self-efficacy.

## The Social Cognitive Model of Counselor Training

As discussed in chapter one, Larson's (1998) social cognitive model of counselor training (SCMCT) is a time focused approach which fosters growth and development in counselors-in-training. The SCMCT is based on Bandura's (1986) social cognitive theory and utilizes the supervisory working alliance to increase counseling self-efficacy including the ability to apply counseling knowledge to clinical practice (Kincade, 1998; Larson, 1998). Social cognitive theory suggests that people have control over their thoughts, actions, and motives as well as the ability to change these processes through self-determination. Bandura (1986) also found that self-

efficacy greatly determined people's willingness to change behaviors. The following are basic tenets of the SCMCT which were presented in chapter one:

1. Counseling self-efficacy is "the primary causal determinate of effective action" in counseling (Larson, 1998, p. 226).

2. A positive supervisory working alliance creates a safe place for counselors-in-training to develop counseling self-efficacy.

3. The level of counseling self-efficacy impacts counselors-in-training in-session responses, risk taking behaviors, and persistence despite failing. The higher the level of counselor-in-training counseling self-efficacy the better they read and flex to clients' needs.

4. Individuals with higher counseling self-efficacy interpret their performance anxiety as a challenge and are more likely to set attainable goals in counseling and supervision (Larson 1998)

5. Bandura's (1989) triadic reciprocal causation occurs when counselors-in-training are learning to counsel clients and interacting with supervisors.

6. The social cognitive theory constructs of mastery, modeling, social persuasion, and affective arousal can increase counseling self-efficacy (Bandura, 1989).

**Self-efficacy, Counseling Self-efficacy, and the Social Cognitive Model of Counselor Training**

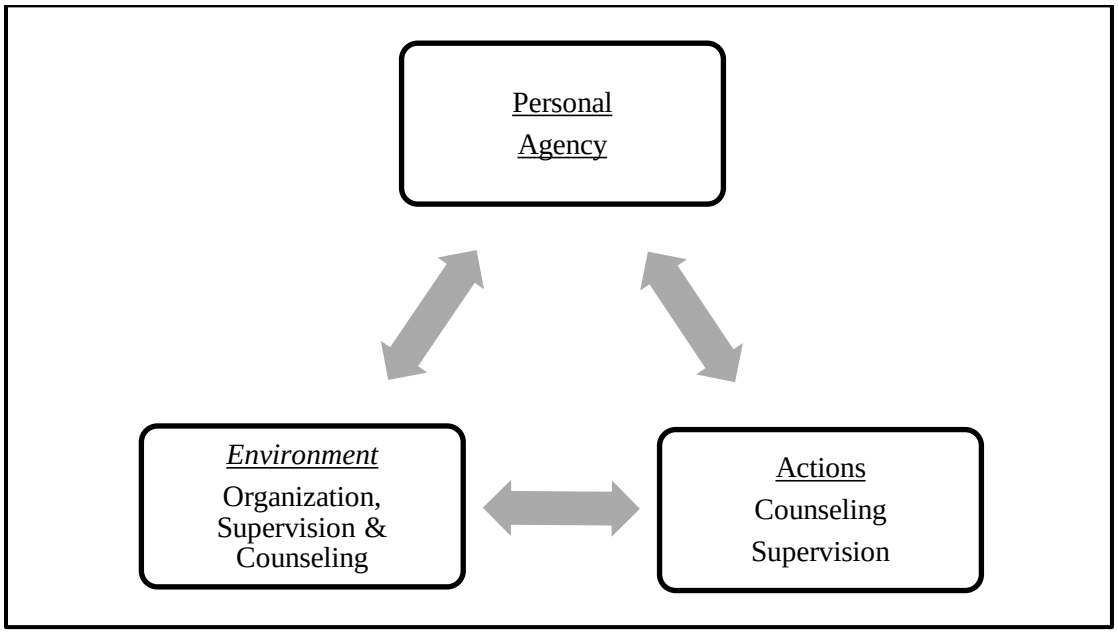
When developing the SCMCT, Larson and Daniels (1998) reviewed counseling literature from 1983 to 1990. Their review included 32 studies on counselor performance and/or counseling self-efficacy. The constructs of social cognitive theory were used to analyze these studies to determine counseling self-efficacy effect on various counselor variables (i.e., personality, attitude, achievement, social desirability, age, race, time spent receiving personal counseling, theoretical orientation, and elementary versus secondary school counseling

positions). Larson and Daniels (1998) found that counseling self-efficacy was the strongest determinant in counselor performance, that the amount of supervision directly affected new counselors' levels of counseling self-efficacy, and that high-performance anxiety decreased counseling self-efficacy. Larson (1998) concluded that counseling self-efficacy is the "primary causal determinant of effective counseling action" (p.180).

**Triadic Reciprocal Causation and the Social Cognitive Model of Counselor Training**

The process of triadic reciprocal causation represents the dynamic, ever-changing relationship between supervisors and supervisees, counselors and clients and the counseling training environment (Kincade, 1998; Larson, 1998). The SCMCT includes three interacting factors that explain how counselors-in-training are reactive and proactive: the counselor's-in-training personal agency, the ensuing actions in counseling and supervision, and the learning environment (supervision and counseling sessions). See Figure 1.

*Figure 1*. Triadic Reciprocal Causation



**Personal Agency**. Personal agency includes counselor-in-training self-efficacy beliefs, which effect their cognitive, affective, and motivational processes to help determine the outcome of a situation, environment, or relational activity (Bandura, 1982; Larson, 1998; Larson & Daniels, 1998). More specifically, personal agency allows counselors-in-training to react in the moment and make affective choices that effect counseling and supervision sessions (Larson & Daniels, 1998).

Unlike stable personal characteristics such as race, gender, and sexual orientation, personal agency encompasses individual characteristics that are fluent (Larson, 1998). Some examples of personal agency are self-awareness, self-esteem, and self-concept. There are seven components to personal agency that are relevant to this model and to counselors-in-training development.

The first is *counseling-related knowledge or skills* which includes knowledge of active listening, micro skills, counseling theories, and of self (Larson, 1998).

The second is *counseling self-efficacy.* As defined previously, counseling self-efficacy is a counselor's belief in their ability to counsel in the near future (Larson, 1998). The counselor's-in-training level of counseling self-efficacy directly impacts the remaining five components of personal agency. That is, counselor-in-training beliefs in their abilities is connected to their cognitive processes, skills and goal setting, and the consequences of counseling actions (Larson, 1998).

The third component of personal agency is *outcome expectancies,* which are counselor-in-training judgments of the outcomes of their counseling actions (e.g., positive change in clients, performance and grades in practicum class) (Larson, 1998). Positive outcome expectancies and counseling self-efficacy are positively related (Larson & Daniels, 1998). That

is, as counselor-in-training counseling self-efficacy increases so do postive outcome expectancies.

*Supervision and counseling goals and plans* is the fourth component of personal agency. Counselors-in-training are expected to have goals for both supervision and counseling, and this component is a measure of how specific, clear, and challenging those goals are compared to the counselor-in-training skill level (Larson, 1998).

The fifth component of personal agency is *cognitive processes.* Cognitive processes refers to the flexibility counselors-in-training display when accessing relevant information, responding to feedback, and taking action (Larson, 1998). For example, counselors-in-training may struggle to note positive interactions or actions when reviewing their counseling tapes during supervision. This speaks to counselor-in-training cognitive processes and the possiblity of their having low counseling self-efficacy.

The sixth component of personal agency is *affective processing.* Affective processing, in this context, refers to counselor-in-training interpretation of their feelings of performance anxiety. According to the SCMCT, counselors-in-training with low counseling self-efficacy will interpret performance anxiety as a debilitating obstacle. Whereas, counselors-in-training with higher counseling self-efficacy will interpret the same level of performance anxiety as motivation to try harder, to attempt new counseling actions, or seek feedback/advice from a supervisor (Larson & Daniels, 1998). Emotional awareness is also a critical aspect of affective processing. Having emotional awareness is being aware of one's own feelings as well as the feelings of the client in session (Larson, 1998). Other affective processes such as depersonalization and emotional exhaustion are negatively correlated with counseling self-efficacy (Larson & Daniels, 1998).

*Self-evaluation* is the seventh component of personal agency. This component focuses on counselor-in-training appraisal of their past performances in counseling sessions (Larson, 1998). Self-evaluation becomes an important skill for counselors as they enter the field and receive less in-depth and frequent supervision. The ability to focus on positive self-feedback and give constructive self-feedback to change aspects of one's performance is linked to higher levels of counseling self-efficacy (Larson, 1998). Further, self-evaluation is critical to efficacious modeling and mastery experiences in supervision. If counselors-in-training do not view a counseling interaction as a mastery experience, then their counseling self-efficacy does not increase, even if the outcome is successful. Should a counseling action fail, supervisors applying SCMCT normalize the failure as an expected part of the developmental process to preserve counselors'-in-training counseling self-efficacy (Larson, 1998).

The sum of the seven components of personal agency are what constitute a counselor's-in-training ability to respond to clients and to generate appropriate counseling actions (Larson, 1998). Larson and Daniels (1998) found that counselors-in-training with higher counseling self-efficacy report more positive outcome expectancies, have more positive self-evaluations, and have lower self-reported levels of distressing anxiety.

**Actions.** The second interacting factor that explains how counselors-in-training are reactive and proactive is *actions*. Actions are behaviors by supervisors and counselors-in-training that impact the supervision/counseling sessions or counselor-in-training personal agency. Examples of supervisory actions for both the supervisors and counselors-in-training include: being prepared for supervision sessions, selecting appropriate models of counseling (review of taped counseling sessions of self and peers), trying/expressing new thoughts, behaviors, and

feelings, openness to supervisory feedback, and being active and instrumental in the supervision process (Larson, 1998).

Effective actions in counseling are based on counselor-in-training levels of training and development (Larson, 1998). As counselor-in-training skill level increases, counseling actions become more complex. For example, counselors-in-training initially focus on performing specific micro skills (open and closed questions, paraphrasing, and reflection). As skill level increases, counselors-in-training begin to integrate micro skills with diverse clientele in counseling sessions, and develop problem-solving skills (Larson, 1998). Counselors-in-training whose skills advance over the course of a semester demonstrate "operative efficacy", which Bandura (1986) defined as "continuously improvising multiple subskills to manage every changing circumstance, most of which contain ambiguous, unpredictable, and often stressful elements" (p. 391). This increase in effective counseling actions creates the mastery level experiences which are at the core of increasing counseling self-efficacy (Larson, 1998).

Counselors'-in-training level of counseling self-efficacy greatly determines the amount of effective actions exhibited both in counseling and supervision. For example, counselors-in-training with low counseling self-efficacy choose less appropriate tapes to show in supervision or focus only on aspects of their performance that are unchangeable (e.g., "My client cannot relate to me because I am White"), give up easily, and are less willing to consider new ideas in counseling. They are resistant to feedback, and their counseling self-efficacy tends to remain the same or decreases over this time. Counselors-in-training with higher counseling self-efficacy can choose appropriate taped sessions of their skills, be receptive to supervisors' and peers' feedback, continue in the face of failure, and are prepared for supervision sessions (Larson, 1998).

**Environment.** The environment consists of both the "perceived environment" and the "objective environment" (Larson & Daniels, 1998, p.193). The perceived environment is based on the client's, the counselor's-in-training, and the supervisor's perceptions of occurrences. The objective environment is based on what was said or done. The environment can include the counselor-client environment, the counselor-supervisor environment, or the organization/setting (Larson, 1998).

The following is an example of triadic reciprocal causation. A minority counselor is working in an organization with rampant racism. The counselor's feelings of discomfort in this *environment* (e.g., co-worker micro-aggressions, "Oh he must have grown up in the ghetto") will impact both *personal agency* (e.g., counselor's counseling self-efficacy and motivation) and the counselor *actions* (e.g., reduction in disclosure during supervision). The minority counselor may experience discomfort as well as decreased counseling self-efficacy in this environment. A supervisor following the SCMCT would make "the environment" a topic of discussion in session, be aware of the level of change (i.e., decrease) in the counselor's counseling self-efficacy, and ask questions about why the decrease in counseling self-efficacy may be occurring from the counselor's perspective. The change in counseling self-efficacy may be displayed in increased resistance toward supervisors or clients, less disclosure in supervision, lower actual or perceived counseling performance, and lower outcome expectancies for clients.

This triadic relationship is constantly in play when counselors-in-training are learning new complex skills. This process explains how each counselor transforms the information learned in class to practicing skills with clients. The "practicing of skills" is when the three factors in the model begin interacting. During a counseling session, a counselor is not just recapping skills knowledge in the form of counseling actions. They are also reacting to the

counseling environment and processing this information cognitively through their own personal experiences, biases, and values. Each of these three factors are determined by the counselor's-in-training stable personal characteristics.

Stable personal characteristics, self-evaluation, and past experiences influence the triadic relationship between environment, personal agency, and action. Stable characteristics are generally unchangeable characteristics such as age, race, sexual orientation, openness to new experiences, level of extraversion, and disability status (Larson, 1998; Larson & Daniels, 1998). Most demographic variables do not impact counseling self-efficacy. Personal agency characteristics, which have more variability than stable characteristics, do impact counseling self-efficacy (Larson, 1998; Larson & Daniels, 1998). To be an effective counselor, counselors-in-training must consider how their self-determining personal characteristics, both stable and dynamic, impact their relationships with clients and supervisors. Counseling self-efficacy positively correlates with outcome expectancies, negatively correlates with affective arousal (performance anxiety), and positively correlates with self-evaluation and personal self-efficacy (Larson, 1998)

**Self-efficacy Theory and the Social Cognitive Model of Counselor Training**

Bandura's (1977) self-efficacy theory is based on research that indicated successful task performance directly influences self-belief in one's ability to accomplish tasks (Kozina et al, 2010). The SCMCT uses Bandura's (1977) four factors (i.e., mastery experiences, modeling, social persuasion, and affective arousal) and applies them to the supervisory context (Larson, 1998). Mastery experiences include counselors-in-training having successful learning (counseling) experiences. Modeling involves watching these successful counseling experiences on video, watching peers' successful counseling experiences, and watching peers go through a

learning process (Larson, 1998). Social persuasion includes supervisory encouragement, feedback, and the ability to provide successful learning situations for counselors-in-training. The affective arousal is counselor-in-training performance anxiety as they begin counseling clients. Additionally, Bandura (1977) stressed the importance of experiences that incorporate the interaction of micro skills (i.e., attending behaviors, questioning, responding, reflecting) rather than reducing them to individual skills such as paraphrasing and questioning.

**Mastery experiences.** Mastery experiences are the most influential factor in increasing counselors'-in-training counseling self-efficacy (Bandura, 1986; Larson, 1998). An experience is considered a "mastery experience" if the counselor-in-training views the experience as a success, regardless of the actual outcome (Barnes, 2004). For example, if the counselor-in-training successfully develops a therapeutic alliance with a client during the initial session but focuses on "not having changed anything in session", this would not be a mastery experience for the counselor-in-training. However, if the counselor-in-training utilizes a skill (i.e., confrontation) which he/she was previously uncomfortable trying, and the client responds positively in session, this would be a mastery level experience. The more mastery level experiences counselors-in-training have, the greater their counseling self-efficacy increases (Larson, 1998).

When counselors-in-training question their in-session performance or when supervisors seek to address performance issues, the SCMCT encourages supervisors to focus on the entire dynamic process (the environment [supervision and counseling sessions] and actions) rather than what the counselor-in-training "did wrong". Supervisors use less successful experiences to increase counseling self-efficacy by identifying process factors rather than pointing out the counselor-in-training flaws (Kincade, 1998; Larson, 1998).

**Modeling.** Modeling is the second most influential factor in increasing counseling self-efficacy (Larson, 1998). The supervisory goal is to increase skills development and counseling self-efficacy in counselors-in-training. Counseling self-efficacy can increase through providing appropriate modeling experiences, such as viewing one's own or peers' recordings of sessions, and through the actions of the supervisor (Larson, 1998). By watching their own successes, others' successes, and supervisors' actions as models, counselors-in-training gain knowledge and skills which translate into in-session interactions with clients. Clinical demonstrations that are at a slightly higher skill level than that of the counselors-in-training are most effective (Larson, 1998). Tasks at a slightly higher skill level creates some performance anxiety, which increases counselor-in-training focus and keeps them in the moment (Larson, 1998).

**Social persuasion.** Social persuasion refers to supervisors providing encouragement and feedback to counselors-in-training. Although realistic feedback is the most helpful, studies show that focusing on the positives and then discussing the negatives is the most effective way to increase a counselor's-in-training counseling self-efficacy (Kincade, 1998; Larson, 1998). Feedback that is constructive, changeable, and specific is recommended. This type of feedback encourages counselors-in-training to attempt new actions rather than be frustrated at what they have yet to accomplish (Kincade, 1998; Larson, 1998). For example, discussing a counselor's-in-training in-session body language can be approached constructively (e.g., "What you did was okay, but maybe add this next time"), providing the counselor-in-training with specific suggestions for the next counseling session.

**Affective processes.** Affective processes also affect counseling self-efficacy (Larson, 1998). Affective processes regulate emotional states and reactions such as anxiety (Bandura, 1994). As previously discussed, depending on counselor-in-training levels of counseling self-

efficacy, the performance anxiety that comes with trying new skills will be perceived as a challenge or a threat. For example, counselors-in-training with high anxiety over performance and low counseling self-efficacy tend to have lower levels of practicum class participation, offer less input to peers, ask fewer questions, and struggle to form peer relationships. Whereas, counselors-in-training with high counseling self-efficacy tend to ask for help with client issues and skills, thereby increasing their counseling self-efficacy (Larson, 1998).

Per the SCMCT, modeling, social persuasion and feedback help counselors-in-training achieve more mastery experiences. Supervisor actions play an integral role in helping counselors-in-training overcome performance anxiety and increase counseling self-efficacy. Having a positive supervisory working alliance is fundamental to achieving these goals (Kincade, 1998). The primary supervisory functions are providing modeling, encouragement and critical, changeable feedback to counselors-in-training (Kincade, 1998; Larson, 1998).

### Supervision and the Social Cognitive Model for Counselor Training

Supervision is integral to counselor-in-training skill development and professional growth. This includes a counselor's-in-training ability to self-evaluate, to be confident in their work, to learn to challenge themselves, and to constantly re-evaluate and be aware of their own self-concept, bias, and congruence (Barnes, 2004; Kincade, 1998; Larson, 1998). The triadic reciprocal relationship between supervisors, counselors-in-training, and clients is discussed during supervision (Larson, 1998). Many supervision activities which promote counseling self-efficacy (watching videos of counseling sessions, receiving positive and critical feedback, and discussing performance anxiety) promote positive supervision relationships (Barnes, 2004; Kincade, 1998). The SCMCT uses counselors'-in-training level of counseling self-efficacy to measure the impact of supervision activities (Barnes, 2004; Kincade, 1998; Larson, 1998).

## Structure and Goals in Supervision

The SCMCT provides structure for supervisors when planning supervision sessions. Supervisory goals include identifying barriers to increasing counseling self-efficacy (Kincade, 1998; Larson, 1998) and providing enough support to offset the challenges of being a novice counselor (Kincade, 1998). Sub-goals to increasing counselor-in-training counseling self-efficacy include creating a level of performance anxiety that is manageable yet motivates counselors-in-training to try harder during counseling sessions, having a positive outlook toward client outcomes, and developing self-evaluation in counselors-in-training (Kincade, 1998).

**Performance feedback in supervision.** Performance feedback in counseling supervision is directly related to counseling self-efficacy. For example, regardless of actual performance, counselors-in-training will change their views of their performance based on supervisory feedback (Daniels & Larson, 2001). If a supervisor provides positive feedback, counseling self-efficacy increases. Further, counselors-in-training with higher counseling self-efficacy demonstrate a greater ability to incorporate supervision feedback into counseling actions (Barnes, 2004; Daniels & Larson, 2001).

The quality of the supervisory working alliance also affects counselor-in-training counseling self-efficacy (Kozina et al., 2010). Perceived "bad supervision" decreases counseling self-efficacy just as "good supervision" supports counseling self-efficacy (Kincade, 1998). The SCMCT incorporates supervisor actions, interventions, and stable personal characteristics into the formation of a successful supervisory working alliance (Larson, 1998).

Per the SCMCT, supervisors help the counselors-in-training understand how their individual characteristics (i.e., assertiveness, attentiveness to detail) influence counseling/supervision interactions (Larson, 1998). When counselors-in-training are receptive to

these discussions, they increase their understanding of "self" in counseling/supervision which increases their effectiveness as counselors (Larson, 1998). Following the idea of triadic reciprocal causation, supervisor self-determining personal characteristics also influence this process. The more aware supervisors are of how their stable personal characteristics influence supervision, the less these characteristics become barriers to a positive supervisory working alliance. Openly discussing the impact of stable personal characteristics during supervision creates a truly warm, supportive environment for counselors-in-training to learn and provides a positive modeling experience. For example, if counselors-in-training believe the age of their supervisor is a barrier to the supervisor understanding their struggles, they may feel less comfortable or willing to disclose in supervision. Supervisors who understand their advanced age and clinical experience can be a distancing factor with young and inexperienced counselors-in-training, may begin the supervision relationship by disclosing examples of how they too experienced performance anxiety as a novice counselor. By bridging barriers that are unchangeable (age and experience level) supervisors increase the chance of a positive supervision experience with counselors-in-training. Experiential learning also provides a means for growth during counseling supervision (Salas, Bowers, & Edens, 2001).

**Experiential Learning in Supervision**

Experiential learning is recognized as one of the most effective ways for students to retain new skill-based knowledge (Salas et al., 2001). Students often ask themselves: "How do I apply the knowledge I have gained in the classroom?" The immediate testing, receiving of feedback, and experiencing positive outcomes when applying new skills and knowledge is essential for retaining new skills (Salas et al., 2001). Per the SCMCT, the level of counseling self-efficacy is the primary indicator of how well counselors-in-training perform counseling

skills learned in the classroom (Larson, 1998). Therefore, increasing counselor-in-training counseling self-efficacy should be a primary focus in practicum supervision (Kozina et al., 2010).

The CACREP (2016) standards promote experiential learning as a means of professional and personal development of counselors in training. Further, out of classroom, non-traditional learning experiences are associated with enhanced learning in counselors-in-training (Barbee, Scherer & Combs, 2003). Students who participate in experiential learning show increased counseling self-efficacy and higher levels of personal and professional growth.

Equine assisted learning (EAL) is an experiential learning approach to self-growth, exploration, leadership, communication and self-efficacy that addresses the criteria set forth by CACREP (2016) and the structure/goals of the SCMCT. The current study explored EAL-S as an intervention for counselors-in-training. An explanation of man's long-standing relationship with equine, the nature of horses and a description of equine assisted activities and therapies follows.

## Equine Assisted Activities and Therapies

Equine assisted learning (EAL) is an experiential learning approach with the primary goal of facilitating personal and professional growth through interactions with equines (PATH, 2016d). The role of the equine in EAL is to reflect participant actions and to provide instant feedback on how the participant's presence is perceived by others (e.g., herd members). The role of the human facilitator is to translate the horse's feedback (i.e., behavior/reaction) and help participants relate what they have learned from the equine interactions to their own habits, skills, and styles of communication and relationship building (PATH, 2016e; Strozzi, 2004). The facilitator can be a mental health professional, an educator, or a life coach.

Another type of equine assisted therapy intervention commonly used with mental health disorders is equine facilitated psychotherapy (EFP). Equine facilitated psychotherapy is an interactive process involving participants, licensed mental health facilitators, suitable equines, and optionally an equine professional if the mental health facilitator is not credentialed as one, which addresses psychotherapy goals set forth by the mental health professional and the client (PATH, 2016c). The differences between EAL and EFP are that the facilitator in EFP is always a mental health professional and the goals are therapy goals, whereas EAL facilitators may be non-mental health professionals and the goal is life skills development. The current study explored the use of an EAL intervention in supervision (EAL-S).

There are various national and international accrediting bodies which have set standards, protocols, and training guidelines for the field of EAAT (Hallberg, 2008). This has helped the field to develop best practices and contraindications of participation (Hallberg, 2008).

**History of Equine Assisted Activities and Therapies**

The horse-human bond has been recognized as a healing therapeutic relationship for centuries (Hallberg, 2008; Kohanov, 2013; Maziere & Gunnlaugson, 2015; Silcox, Castillo, & Reed, 2014). The natural means of horses influencing human interactions and relationships is not a new concept (Hallberg, 2008; Kohanov, 2013). Horses have been the deciding factor in the rise and fall of nations for thousands of years. Ancient cave drawings from 3000 years ago depict people riding horses. There is archaeological evidence of humans riding horses that dates back over 6000 years (Hallberg, 2008). Regardless of what millennium the first "domestication" of the horse occurred, most historians agree that the evolution of the horse-human relationship has influenced human evolution, growth, and development (Hallberg, 2008; Kohanov, 2007, 2013).

Not only did domesticating and riding horses change the face of warfare, it also influenced the spread of cultures, language, and transportation (Hallberg, 2008). By riding horses, people began understanding how big the world truly was. Many cultures became great conquerors due to their horsemanship skills and defeated non-riding cultures. The Huns, Mongols, and Ancient Greeks are a few examples (Hallberg, 2008). Horses have been a symbol of mass destruction or a symbol of companionship in times of battle. For a man traveling from one battle to the next, his relationship with his horse was the closest and most important relationship (Hallberg, 2008).

As the role of horses for war and work decreased, their role as therapeutic facilitators came to the forefront. The Greeks used horses to rehabilitate soldiers in ancient times (Silcox et al., 2014), as did the Germans during World War I (Kohanov, 2013). In 1944, Pawling Army Air Force Convalescent Hospital, located in New York, brought in horses and other animals to interact with the soldiers healing from physical and mental battle injuries (Silcox et al., 2014).

In the 1950s Liz Hertel of Denmark, a woman who used a wheelchair, won the silver medal in dressage at the Helsinki Olympics (Berg & Causey, 2014; Hallberg, 2008). Hertel's winning of the silver medal was a catalyst for the birth of therapeutic riding. Most of the early therapeutic riding movement focused on the movement of the horse being therapeutic for those with physical disabilities. Therapeutic riding expanded in popularity, which prompted the development of ethical and safety standards as well as a certification procedure for professionals (Hallberg, 2008). In 1969, the North American Riding for the Handicapped Association (NARHA), currently the Professional Association of Therapeutic Horsemanship, International (PATH), was founded.

Animal assisted therapy research in the 1980s focused on companion animals and their influence on therapeutic change (Hallberg, 2008; Silcox et al., 2014). More specifically, research linked the presence of a companion animal to lowering blood pressure, lowering stress reactions, and decreasing doctor visits in the participants (Hallberg, 2008). Despite this evidence, insurance companies refused to cover animal assisted therapies due to lack of published research supporting its effectiveness. Many studies were presented at national conferences but not in peer reviewed journals. This caused the field to "hover on the edge of acceptance" for an extended period (Hallberg, 2008, p. 33).

While the research on companion animals prompted interest in the field, there were differences between companion animals and the role horses play in therapy. For example, a dog is a willing, loyal therapeutic partner who is immediately trusting in nature unless they have prior experience with abuse or neglect by humans (Hallberg, 2008). Therefore, companion dogs do not illicit much of a challenge in relationship building, gaining trust, and communication for people. Hallberg (2008) explains that dogs are witnesses to our evolution while horses have helped facilitate it.

Between 1988 and 1993, 52 scientific papers were published on the therapeutic benefits of animal-human interactions (Hallberg, 2008). However, the benefits to human's mental health and animal-human interaction were not research until the 1990s. Pioneers in the field of equine facilitated psychotherapy (EFP) and equine assisted learning (EAL) began partnering with in-patient addiction treatment centers, which eventually led to the formation of the Equine Facilitated Mental Health Association (EFMHA) in 1996. This organization was instrumental in the creation of specific terminology, protocol, ethical standards, and indications/contraindications of mental health interactions with horses (Hallberg, 2008).

Since 2005, research exploring the use of horses in psychotherapy settings has increased. The 2015 PATH fact sheets list 143 centers offering EFP and 333 centers offering EAL (PATH, 2016a). These numbers do not include private centers or foundations offering and supporting programs that are not affiliated with PATH.

## Equine Assisted Activities and Therapies with Clinical Populations

While research concerning the inclusion of animals in supervision is in its infancy, the effectiveness of equine assisted activities and therapies (EAAT) with clinical populations is supported. More specifically, EAAT increases self-efficacy, social and leadership skills, relationship building, staying in the here-and-now, and communication skills, as well as decrease anxiety and aggression in clinical populations (Askin, 2008; Dyk et al. 2013; Gehrke, 2013; Knack, 2015; Kohanov, 2013; Lee et al., 2016; Meola, 2016; Meola & Goodwin, 2016; Meola & Sias, 2016; Roberts, 2000; Schultz et al., 2007; Selby & Smith-Osborne, 2013; Strozzi, 2004; Sudekum Trotter et al., 2008; Whittlesey-Jerome, 2014).

Whittlesey-Jerome (2014) conducted an exploratory pilot-study with a mixed method design to examine the impact of equine-assisted psychotherapy (EAP) on the self-efficacy of 14 women who identified as victims of interpersonal violence (IV). More specifically, the author postulated that participation in a two-hour EAP group along with an eight-week traditional IV treatment (i.e., case management/individual therapy and group therapy) would be more effective in reducing depression and anxiety and increasing self-efficacy and global functioning than traditional IV treatment alone. Initially, there were 7 participants in the EAP group and 7 in the comparison group but 1 participant discontinued services in the comparison group which left a total of 13 participants. Participants' ages ranged from 28 to 64 with an average age of 43.7. Six participants identified as Hispanic and 7 as non-Hispanic.

Quantitative assessments included the *General Self-Efficacy Scale,* the *Burns' Anxiety Scale, Beck's Depression Inventory,* and the *Global Assessment of Functioning Scale.* Quantitative assessments were administered prior to the first group session and immediately following the final group session. The group curriculum focused on "empowerment and possibility" (e.g., safety, boundaries, communication, self-care, body/self-awareness, self-esteem, assertiveness) (Whittlesey-Jerome, 2014, p. 88). All EFP groups were co-lead by an equine specialist and a licensed professional counselor, both of whom were credential by EAGALA.

Qualitative data was gathered through participant journaling. All participants were given notebooks and encouraged to "write about their thoughts and feelings throughout the study" (Whittlesey-Jerome, 2014, p. 88). Participants in the EFP group were encouraged to write at the farm during debriefing sessions. Participants in the comparison group were encouraged to find quiet times to journal throughout their week. Additional information was gathered from a student observer who watched EAP participants' and horses' interactions from a distance. Qualitative data was analyzed by arranging responses (i.e., words or short phases) and identifying reoccurring themes which corresponded with the quantitative assessments (i.e., self-efficacy, depression, anxiety, and general functioning). Due to time constraints, no data saturation point was obtained.

Results revealed that both groups (EAP and comparison) experienced an increase in self-efficacy and global functioning, as well as a decrease in anxiety and depression. However, the EFP group experienced greater improvement in all areas (effect size was small).

The qualitative portion included the following overarching themes for EAP group participants; "perception, boundaries, assertiveness, letting go, just being, comfort in the now,

horses, relationship, strong, change, crying, power, angry, peace, listening, tired, f***ing frustrated, and sad" (Whittesley-Jerome, 2014, p. 92). The comparison group participants overarching themes included: "children, legal issues, relationships, coping, law, overwhelm, angry, confrontation, and power" (Whittesley-Jerome, 2014, p. 92). Whittesley (2014) noted that the comparison group journals focus on interpersonal relationships with limited detail, whereas the EAP group journals "capture the essence of their [participants'] experiences" in "rich detail" (p. 92). Based on the EAP group journals and the student observer's comments, the horses became "transitional objects of comfort" for participants and assisted participants in assertiveness and boundary setting (Whittesley-Jerome, 2014, p. 93).

Whittesley-Jerome (2014) cites the following limitations: (a) the sample is one of convenience, which limits the generalizability of the findings and (b) confounding variables such as one participant's use of anti-anxiety medication and ongoing treatment were present. Noted strengths were the methodology (quantitative and qualitative analysis) is easily replicated, and although the sample was small (7 in the EFP group and 6 in the comparison group), there was a diverse mix of Hispanic and non-Hispanic participants, which is lacking in other research studies in the field (Selby et al., 2013; Whittesley-Jerome, 2014). Despite the limitations, the EAP intervention increased participants' self-efficacy and global functioning.

Sudekum Trotter et al. (2008) examined the effectiveness of a 12-week equine assisted counseling (EAC) intervention for at-risk adolescents. The study's purpose was to determine if EAC group activities would positively affect participants who were at risk academically and socially and to determine if the EFP group would be more effective than the program "Rainbow Days" (RD). Rainbow Days is an in-school, curriculum based support group, which focuses on listening skills, emotions management, friend selection, and health choices (Rainbow Days,

(1998). The EFP group included activities such as: (a) an introduction to the ranch and to horse communications (e.g., what it means when a horse puts its ears back); (b) group norms for respecting and interacting with the horses; (c) choosing a horse; (d) mounting and dismounting the horse; (e) catch and release activities; and (f) walking a horse through an obstacle course.

The sampling procedure and sample was a non-random, convenience sample of students from one southwestern school district. Students ranged from third to eighth grade. The study began with 205 participants. However, 41 participants withdrew, leaving 126 participants in the treatment group, and 38 participants in the control group. Of the 126 participants, 102 were male and 62 were female. As for participant race, 136 were Caucasian, 12 were African American, 11 were Hispanic and 5 reported "other". There were 86 elementary school participants and 78 middle school participants. Demographics were similar for treatment and control groups.

The control group participated in the Rainbow Days (RD) program and the treatment group participated in EAC group activities. Both groups received therapy for 12 weeks, with 6 to 8 participants in each group. However, the EAC group was held for 2 hours a week and the RD group for 1 hour a week.

Assessments included the *Behavioral Assessment System for Children (BASC)* and the *Psychosocial Session Form (PSF).* The *BASC* consists of a *Self-Rating Scale (SRS)* and a *Parent-Rating Scale (PRS)*. The *BASC* has strong reliability and validity with a mean correlation of 0.60 and with test-retest reliability (within several weeks) scores in the 0.80s to 0.90s (Reynolds & Kamphaus, 1992, as cited in Sudekum Trotter et al., 2008). Participants' parents completed the *PRS* prior to the first group session and following the final group session. The *PSF* was completed by participants at the first and final group meetings.

Within-group paired *t*-tests were used to evaluate pre-post-scores for externalizing, internalizing, maladaptive, and adaptive behaviors. Results indicated that the EAC group showed significant gains in 17 behavior areas, while the RD group showed significant gains in only 5 areas. Between-groups ANCOVA were used to compare the RD group scores to the EAC group scores. The EAC group showed significant gains in 7 areas. Furthermore, EAC participants showed significant improvement in social behavior ratings. Sudekum Trotter et al. (2008) note the following limitations, which may have impacted the study's findings: (a) variance in the numbers of hours of weekly therapy (EAC group received 2 hours versus RD group received 1 hour), (b) the EAC group was larger than the RD group, (c) Inter-rater reliability was not calculated for the PSF, (d) participants may have experienced developmental changes at varying rates of the 12 week study period, and (e) environmental differences (farm setting versus classroom setting). Despite these limitations, Sudekum Trotter et al. (2008) findings support the use of EAC as a method of improving academic and social skills of at-risk youth.

Nurenberg et al. (2015) compared canine assisted therapy, equine assisted therapy, and treatment as usual with psychiatric patients hospitalized for "aggressive or highly regressed behavior" (p. 80). This randomized controlled study included 90 participants who had displayed 3 or more violent incidents in the past 12 months. Participants were randomly assigned to a canine assisted group (CAP), an equine assisted group (EAP), a social skills psychotherapy group, or regular hospital care. Participants' average age was 44, 63% were males and 37% were females, and 61% were Caucasian. Fifty-six of the participants were committed to the hospital involuntarily and 61% had a diagnosis of schizophrenia or schizoaffective disorder.

All groups met for 10 weeks in 40 to 60 minute sessions. Prior to the start of the research, staff completed assessments without knowing which group participants were assigned, and then

again three months after the study started, with limited knowledge of what treatment the participant had received. A typical EAP session included greeting the horse, review of safety measures, pre-activity discussion, activity with the horse, and post-discussion about the session. The CAP sessions were structured the same as the EAP sessions. The social skills group was conducted in a novel setting and with varied staff to provide a stimulating environment away from the typical hospital format. The control group remained in care as usual at the hospital.

The outcomes were based on participant data from two months' pre-intake and three months' post intake. None of the staff doing assessments were involved in the EAP or CAP activities.

The primary outcome measurements were the number of participants' aggressive behaviors as noted by staff incident reports as well as the *Overt Aggression Scale* (*OAS-M*). Secondary outcomes measures included the *Brief Psychiatric Rating Scale* (*BPRS*), the *Life Skills Profile* (*LSP-20*), the *Greystone Intrusiveness Measure* (*GIM*), the *Pet Attitude Scale-Modified* (*PAS-M*), and visual analog scales that were completed by patients and staff. The analog scales were used to quantify anxiety, depression, isolation and anger. Analysis of variance (ANOVA) in generalized linear models (Tukey post hoc test) was used to analyze the data for the four intervention groups, and covariance analyses were used to evaluate effects in the violent incidents models.

Results showed a decrease in violence-related issues for participants in the EAP group and an increase in the other groups. Secondary aggressive measures, specifically the OAS-M, showed the EAP participants' aggressive behaviors decreased (EAP, $p = 0.29$; CAP, $p = 0.74$; SSP) for participants. Aggression against objects and people decreased in the EAP group and increased or stayed the same in other groups. The need for 1:1 clinical observation of participants

by hospital staff was reduced in the EAP group and CAP group. The increased benefit of EAP versus CAP indicates that there may be benefits specifically to EAP as opposed to other animal assisted therapies (AAT). An important finding from this study is that less than an hour of weekly EAP interventions had a "detectable effect on a serious and at times intractable dimension of behavior" (Nurenberg et al., 2015, p. 85) and brought aggression levels lower than the baseline measurement. The study also found the benefits to the EAP group extended at least a few weeks beyond the intervention's completion. Another finding indicates that there is no "dose effect" for EAP interventions, as there was no significant relationship between number of sessions and reduction of aggressive behaviors. This finding indicates that despite a higher cost associated with EAP, it may be a more feasible augmentative therapy due to its short-term application and long-term benefits.

Nurenberg et al. (2015) note the following limitations: (a) erratic attendance of participants due to weather and other factors and (b) observer expectancy effect. That is, staff were asked to rate how helpful AAT would be prior to participants' completion of study ("detrimental" to "very helpful"). For those participants' whose staff rated AAT as potentially "very helpful", there was a large reduction in aggressive behaviors. For those whose staff rated it as "less helpful", there was less or no significant change in participants' aggressive behaviors. This could indicate that specific characteristics of these participants caused the AAT to be more effective, or that expectations of staff influenced outcomes. For supervising counselors-in-training, this could be an important aspect if supervisors or faculty do not believe in the potential of the equine assisted learning supervision intervention for growth.

Earles, Vernon and Yetz (2015) explored the effectiveness of equine assisted therapy (EAT) as a treatment for anxiety and post-traumatic stress disorder (PTSD). Participants

included 12 females and 4 males ($N$ = 16) between the ages of 33 and 62, with a median age of 51. All participants had at least a high school education, met at least one Criterion A traumatic event (e.g., sexual assault, life-threatening illness, sudden death of a significant other) in the last 1 to 39 years on the *Life Events Checklist* (*LEC*), and had PTSD symptoms above the recommended cutoff score of 31 on the *Post-Traumatic Stress Disorder Checklist-Specific (PCL-S).*The *PCL-S* is a 17-item assessment that evaluates the symptom severity of PTSD (Cronbach's alpha of α = 0.88) (Weathers et al., 1993, as cited by Earles et al., 2015). The *LEC* is a 17-item questionnaire which assesses trauma history (Blake et al, 1995 as cited by Earles et al., 2015).

Additional psychological and physical health assessments utilized included: (a) the 18-item *Trauma Emotion Questionnaire* (*TEQ*) (Cronbach's α = .89) (Vernon, 2009; as cited by Earles et al., 2015), (b) the 9-item *Patient Health Questionnaire* (*PHQ).* a measure depression (Cronbach's α = .91 ) (Kroenke, Spitzer & Williams, 2001; Spitzer, Kroenke, & Williams, 1999; as cited by Earles et al, 2015), (c) the 1-item *Alcohol Use Disorders Identification Test* (AUDIT) (Cronbach's α = .91 ) (Saunders, Aasland, Babor, de la Fuente, & Grant, 1993; as cited by Earles et al., 2015), (d) the 15-item *Somatic Symptom Severity Scale* (*SSS scale*) taken from the *Patient Health Questionnaire* (Cronbach's α = .68) (Kroenke, Spitzer & Williams, 2002; as cited by Earles et al., 2015), and (e) the 7-item *Generalized Anxiety Disorder Scale* (Cronbach's α = .87) (Spitzer, Kroenke, Williams, & Lowe, 2006; as cited by Earles et al., 2015).

Furthermore, mindfulness, coping strategies, and social supports were measured with additional questionnaires, including: (a) the 39-item, *Five Facet Mindfulness Questionnaire* (*FFMQ)* (Cronbach's α = .86; Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006; as cited by Earles et al. 2015), (b) the 14-item, *Proactive Coping subscale* of the *Proactive Coping Inventory* (Cronbach's α = .93; Greenglass, 2002; as cited by Earles et al, 2015), (c) the 9-item,

*General Perceived Self-Efficacy Scale* (Schwarzer & Jerusalem, 1995; Cronbach's α = .97), (d) the 15-item, *Social Support Scale* (Cronbach's α = .64; Cohen, Mermelstein, Kmack, & Hoberman, 1985), (e) the 5-item, *Satisfaction With Life Scale* (Cronbach's α = .77; Diener, Emmons, Larsen, & Griffin, 1985), and (f) the 10-item, *Life Orientation Test-Revised* (Cronbach's α = .93; Scheier, Carver, & Bridges, 1994).

Pre-tests were administered to participants a few weeks before the first session by a research assistant not involved in the treatments. Post-tests were administered upon conclusion of the final session at the facility. Researchers used paired t tests to report means, standard deviations, and effect sizes. Results showed a significant decrease in participants' PTSD symptoms ($d$ = 1.21), less severe emotional responses related to trauma ($d$ = 0.60), and less generalized anxiety reported ($d$ = 1.01). Participants also reported fewer depressive symptoms ($d$ = 0.54), an increased use of mindfulness strategies ($d$ = 1.28), and a decrease in alcohol use ($d$ = 0.58). There were no significant changes found in participants' self-report of physical health, general perceived self-efficacy, social support, life satisfaction, or optimism.

Limitations of this study included lack of a control group, lack of follow-up data, and the influence of current treatments and medications. Despite these limitations, Earles and colleagues' (2015) study provides evidence that EAT is an effective treatment for anxiety and PTSD.

Kern-Godal, Brenna, Arnevik and Ravndal (2016) explored the contributions of horse assisted therapy (HAT) on an adult population being treated for substance abuse. Participants included 4 females and 4 males ($N$= 8), whose ages ranged from 20 to 30 years. A purposive sample based on demographic data was used. All the participants were registered in the Youth Addiction Treatment Evaluation Project; five were acute inpatient, 2 were residents of the assessment or intermediate unit, and one was in the day treatment unit.

The HAT intervention consisted of 12 sessions conducted at a farm. The first four sessions were relationship building, safely, and handling and caring for horses. The remaining eight sessions consisted of activities that were chosen per individual client goals. Data was collected over 8 weeks through semi structured interviews. HyperRESEARCH (Researchware, Inc.) was used to code the transcribed interviews. Transcripts were reviewed for accuracy by the participants and thematic analysis was reviewed by the primary researcher and staff. Care was taken to ensure that the least possible confusion occurred during translation from Norwegian to English.

Results showed that the HAT intervention was associated with a "break from usual treatment" with main themes of: (a) change of focus or forgetting everything, (b) activity, (c) identity and (d) motivation (Kern-Godal et al., 2016, p. 102). The *Change of Focus* aspect included: (a) being in the here and now, (b) forgetting one's own issues to focus on the needs of the horse and being useful, (c) developing a more caring relationship with horse and barn staff and other participants, and (d) feeling a sense of responsibility for self and others. The *Activity* aspect included: (a) participants doing something productive/worthwhile, and (b) going back to work (in a good way). Participants also noted their actions felt appreciated by the horses and barn staff. The *Identity* aspect consisted of feeling recognized by the horses and barn staff as an individual rather than a drug use, which gave participants a sense of normalcy and inclusion. The *Motivation* aspect was also increased by the individual focus and lack of focus on drug use. Participants reported feeling more like a person, and a sense of "positive self", due to facing challenges and succeeding, feeling needed, and feeling accepted.

Limitations of this study include: (a) the language translation, which may have lost some of the nuance of participants' communication, (b) the small sample, which limits the

generalizability of the study's finding, (c) the participants were undergoing other therapy at the center, which suggests changes reported may have been due to HAT participation, the other therapies, or both, and the methodology is limited due to the authors not describing the 12 sessions with horses. Despite these limitations, Kern-Godal, and colleagues' (2016) findings suggest that HAT was effective in building relationships, staying in the here-and-now, and increasing motivation in individuals who use substances.

Klontz, Bivens, Leinart and Klontz (2007) evaluated the effectiveness of equine-assisted experiential therapy (EAET) in decreasing overall psychological distress and increasing psychological well-being (i.e., self-actualization) in 31 adults in a residential treatment program. Klontz and colleagues (2007) describe EAET as a combination of "experiential therapy with specific equine activities to give clients the opportunity to work through unfinished business, relieve psychological distress, live more fully in the present, and change destructive patterns of behavior. In EAET, "horses serve as catalysts and metaphors to allow clinical issues to surface" (Klontz, et a.., 2007, p. 258). Further, psychodrama is the theoretical bases of EAET. Participants included 22 females and 9 males, whose ages ranged from 23 to 70 with a mean age of 44.7. Participants' averaged 15.7 years of education, and over 90% were Caucasian. The study instrumentation included the *Brief Symptoms Inventory (BSI)* and the *Personal Orientation Inventory (POI)*. The *BSI* includes 53 Likert scale-items, which measure psychological symptom patterns. The *BSI* summary scale, *Global Severity Index (GSI),* provided the measurement of participants' general clinical distress. Pathological problems are indicated when a *GSI* total score is $\geq 63$.

The *POI* is a 150-item, true/false instrument that measures "constructs related to self-actualization" (Klontz et al., 2007, p. 258). Two scales were used to evaluate overall self-

actualization: *Time Competent* (*Tc*) and *Inner Directed* (*I*). The *BSI* and *POI* were administered pre- and post-EAET treatment as well as at the six months' follow-up.

Participants received 28 hours of equine assisted therapy (EAT) as part of their treatment at the residential program. The EAT activities included: horse choosing and grooming, horse mounting work, horse walking, trotting and lunging work, and the inclusion of role-playing and role reversal, sculpting, mirroring and other Gestalt techniques.

Group EAT sessions were led by 5 master's level, licensed counselors (3 females and 2 males) who also held Level II certifications in Experiential Therapy. The counselors averaged 15 years of experience in Experiential Therapy and 3 years in EAET.

Multiple analysis of variance (MANOVA) with repeated measures were used to analyze the data. Results showed a significant effect for the pre- versus post- versus follow-up tests of the *BSI GIS* total scores (Wilks' Lambda = .551, $F$ [2, 27] = 11.019, $p < .05$, $\varepsilon 2 = .449$). Repeated contrasts were used to examine this main effect, and results showed a significant decrease in participants' *GIF* scores from pre- to post-test ($F$ [1, 28] = 22.563, $p < 0.05$, $\varepsilon 2 = .446$). However, no significant difference was found between post-test and six-month follow-up. The *GSI* effect sizes were 0.800 s.d. for both pre-post and post-follow-up. Sixty percent of participants scored in the clinical range (i.e., pathological problems) at pre-test; however, only 20% remained in the clinical range at post-test and 27% were in the clinical range at the 6 months' follow-up.

Similar results were found for participants' POI scores. Significant effects for the pre- versus post- versus follow-up were found (Wilkes Lambda = .536, $F$ [4,114] = 10.442, $p < 0.05$, $\varepsilon 2 = .268$). Again, repeated contrasts were used to examine this main effect, and results showed a significant increase in participants' scores from pre- to post-test. However, no significant

difference was found between post-test and six-month follow-up. The pre-post effect sizes were: -0.867 s.d. for the *Tc* scale and -1.180 s.d. for the *I* scale. The pretest to 6-month follow-up effect size were -0.768 s.d for the *Tc* scale and -0.900 s.d for the *I* scale. Further, 17% of participants had *Tc* total scores above the mean for a "normal adult sample" at pre-test; however, at post-test, 37% scores above the mean and 43% score above the mean at the 6 months' follow-up. As for the *I* scale results, 30% of the participants had total scores above the mean for "a normal adult sample" at pre-test, 67% scored above mean at post-test, and 64 % above the mean at the 6-month follow-up. Participants also reported being able to be present and live more fully in the moment, experiencing less regret, resentment, guilt, and fears about the future, and were more independent and self-supportive.

Klontz and colleagues (2007) note several limitations, including not having a control/comparison group, use of a non-random sample, and participants' involvement in inpatient treatment as well as EAET. Even with these limitations, the findings support that EAET participation decreased psychological distress symptoms and increased overall participants psychological functioning.

Nimer and Lundahl (2007) conducted a meta-analysis on animal-assisted therapy (AAT). Animal-assisted therapy is "the deliberate inclusion of an animal in a treatment plan… [which] involves a credentialed treatment provider who guides interactions between a patient and an animal to realize specific goals (Nimer and Lundahl, 2007, p. 225). To identify AAT studies, Nimer and Lundahl (2007) conducted: (a) computer searches (11 databases such as PsychInfo and MEDLINE), (b) "hand searches" of journals that were known to publish AAT studies, and (c) a review of the reference lists of all retrieved articles. A total of 250 studies were found. Of those, 49 met following inclusion criteria: (a) focusing on animal assisted therapy (as opposed to

pet ownership), (b) having at least five participants in the treatment group, (c) having data to calculate an effect size and (d) being written in English.

Nimer and Lundahl (2007) organized studies based on dependent variables, independent variables and methodological rigor. Dependent variables included: (a) well-being indicators (e.g., anxiety, depression, fear); (b) behavioral actions (e.g., rule compliance, resistance [verbal], aggression, violence); (c) autistic spectrum disorders/behaviors (e.g., increase in communication and social skills, decrease in self-absorption); and (d) medical symptoms (e.g., coordination and fine/gross motor skills, heart rate, blood pressure). Independent variables included: age of participates (i.e., pre-adolescence, adolescence, adulthood and late life [65 years and older]); type of presenting problems, control/comparison group usage, animal type (e.g., horses, dogs, dolphins, rabbits, birds); length (i.e., number of sessions); location (e.g., office, camp, residential program); and delivery of treatment (i.e., individual, group, combination of both). Methodological rigor was measured on a 9-point scale. One point was given for each of the following: (a) use of a control group, (b) use of randomization, (c) use of blind coding, (d) use of a manualized treatment, (e) use of a minimum of 3 sample descriptors, (f) use of established measures, (g) providing a detailed description of study intervention and location, and (h) providing information to calculate effect sized (i.e., means and standard deviations as opposed to t-test, *p* value). Cohen's d was used to measure study effect size (i.e., small (0.2), medium (0.5) and large (0.8) (Cohen, 1988).

Findings showed an effect size for animal assisted therapy studies in the moderate range for behavioral indicators with $d = 0.51$ (Nimer & Lundahl, 2007). This effect size related to behavioral symptoms and medical indicators. For emotional well-being, they were in the low to moderate range with a $d = 0.39$. The results of the meta-analysis indicate that animal-assisted

therapy helps people heal from different types of symptoms (behavioral, medical, emotional well-being, and autism). This meta-analysis also determined that further research is needed due to the large array of animal assisted therapy interventions and settings that are being used with many different populations. A major limitation noted was the dependent variables and the independent variables, or methods of AAT offered, were quite varied.

Selby and Smith-Osborne (2013) conducted a review of EAAT literature. The *Population, Intervention, Comparison, and Outcome (PICO) Model* was used to evaluate a study's inclusion. More specifically, each study in the review discussed or "define[d] the population under study, the specified intervention, the comparison [treatment or group] or lack thereof, and desired outcomes, all with an element of time; for example, How old are the participants? How long is the treatment protocol? When is the outcome measured?" (Selby & Smith-Osborne, 2013, p. 420). Review exclusions included: (a) studies exclusively on hippotherapy, (b) studies published before 2000, (c) studies that were qualitative in nature, and (d) studies not available in English or in their entirety.

Sixteen electronic databases were searched and a hand search was conducted on peer-reviewed publications, gray literature, and white literature. Of the 103 published studies, 14 met the inclusion criteria and 9 demonstrated statistically significant results for equine assisted interventions. Study samples included: (a) at-risk adolescents, (b) able bodied, non-diagnosed girls and boys ages 7 to 17, (c) women in a grief support group, (d) children diagnosed with emotional disturbances ages 4 to16 and ages 10 to 12, (e) adolescents in residential or outpatient treatment ages 12 to18, (f) youths from an alternative school with an severe emotional disturbances ages 10 to 13, (g) at-risk children ages 8 to 13, (h) adults ages 21 to 45, (i) adults ages 23 to 70, (j) adults females diagnosed with post-traumatic stress disorder (PTSD), (k) males

in residential treatment ages 6 to 16, (l) children in residential treatment with severe emotional disturbances ages 6 to 16, and (m) at-risk third to eighth graders (Selby & Smith Osborne, 2013).

The collective results found EAAT: (a) decreased depression and anger, (b) increased quality of life and perceived self-confidence, and (c) decreased self-reported physical symptoms (though no significant physiological changes were found).

Selby and Smith-Osborne (2013) noted several limitations. One being the "broad range" of EAAT techniques, instruments (i.e., *Self-Esteem Scale* [Greenwald, 2001; Iannone, 2003, as cited in Selby & Smith-Osborne, 2013], *Nowicki-Strickland Locus of Control Scale* [Bowers & MacDonald, 2001, as cited in Selby & Smith-Osborne, 2013; Ewing et al., 2007, as cited in Selby & Smith-Osborne, 2013; Iannone, 2003, as cited in Selby & Smith-Osborne, 2013], *Self-Perception Profile for Children* [Ewing et al., 2007, as cited in Selby & Smith-Osborne, 2013; Kaiser et al., 2006, as cited in Selby & Smith-Osborne, 2013; Kaiser et al., 2004, as cited in Selby & Smith-Osborne, 2013], *Self-Perception Scale for Adolescents* [Bowers & MacDonald, 2001, as cited in Selby & Smith-Osborne, 2013], *Children's Depression Inventory* [Bowers & MacDonald, 2001, as cited in Selby & Smith-Osborne, 2013; Ewing et al., 2007, as cited in Selby & Smith-Osborne, 2013], *Children's Loneliness Questionnaire* [Bowers & MacDonald, 2001; Ewing et al., 2007, as cited in Selby & Smith-Osborne, 2013]), and clinical populations, which made comparisons of results difficult. Two, most studies were small ($N$ = 10 to $N$ = 63) samples of convenience (Shambo et al., 2008; Schultz et al., 2007). Only Graham (2007) and Trotter et al. (2008) used a random-sample comparison design.

Three, studies failed to address sample attrition (Kaiser et al., 2006, as cited in Selby & Smith-Osborne, 2013; Kaiser et al., 2004, as cited in Selby & Smith-Osborne, 2013; Shultz, 2005, as cited in Selby & Smith-Osborne, 2013; Tetreault, 2006, as cited in Selby & Smith-

Osborne, 2013; Sudekhum Trotter et al., 2008, as cited in Selby & Smith-Osborne, 2013), and four, several studies used nonequivalent comparison groups (Iannone, 2003, as cited in Selby & Smith-Osborne, 2013; Shultz, 2005, as cited in Selby & Smith-Osborne, 2013; Trotter et al., 2008). Selby and Smith-Osborne (2013) acknowledge that EAAT effectiveness research is primarily qualitative in nature and quantitative EAAT research "is emerging" (p. 428). Therefore, they call for quantitative research which includes the use of comparison groups. The current study sought to answer this call.

**Implications of the Clinical Population Literature**

Research with clinical population supports the efficacy of equine assisted activities and therapies (EAAT). However, there are methodology limitations including the use of small samples of convenience and the lack of random sampling, random assignment, and control groups (Anestis, Anestis, Zawilinksi, Hopkins & Lilienfeld, 2014; Knack, 2015; Selby et al., 2013).

Research that supports the effectiveness of EAAT beyond clinical populations is needed. This includes helping professionals who benefit professionally and personal from skill development through EAAT. During the 2015 PATH International Conference presentation, Knack (2015) called for EAAT research which: (a) includes larger samples, (b) utilizes standard definitions of activities, (c) provides adequate descriptions of the methodology including the length and description of treatment, (d) includes reliable and valid diagnostic instruments, and (e) applies appropriate statistical analysis (e.g., experimental/treatment and control groups with randomized assignment, accounting for extraneous variables). Additionally, Anestis and colleagues (2014) point out the need for quantitative EAAT research. The current study sought to address these limitations.

## Equine Assisted Activities and Therapies with Helping Professionals and in Supervision

The current study is the first to examine the effectiveness of equine assisted learning (EAL) as a supervision intervention for counselors-in-training. The intervention in this study is referred to as an equine assisted learning supervision intervention (EAL-S). As previously noted, the use of equine assisted activities in counselor supervision is in its early stages. However, this author located two related research studies, one exploring why counselors choose EFP over other interventions (Abrams, 2013) and another exploring the impact of a one-day EAL intervention with nurses (Dyk et al., 2013). Further, one peer reviewed study, which focused on animal assisted supervision, was located (Stewart et al., 2013). A conceptual article was also found discussing the potential effectiveness of adding animal assisted interventions to supervision (Owenby, 2017). This section will discuss these studies and relate them to the current research.

Abrams (2013) conducted a qualitative phenomenological study with licensed mental health professionals who utilized equine facilitated psychotherapy (EFP) as an intervention when counseling veterans diagnosed with post-traumatic stress disorder (PTSD). Participants included five females, whose ages ranged from 33 to 66 and whose years of counseling experience ranged from 6 to 33 years. Participants' use of EFP in counseling ranged from 1 to 6 years. Four participants were from locations on the East Coast and one was from the West Coast.

Abrams (2013) conducted a single, semi-structured, 90-minute interview with participants. Interview questions focused on (a) why participants chose EFP as an intervention, (b) how participants perceived the efficacious of the EFP treatment, and (c) how common factors of the client, therapist, and relationship were reflected in the EFP process. The interview guide was reviewed by experts in EFP/EAP as well as experts in the use of EFP/EAP with veterans with PTSD. Abrams (2013) transcribed interviews and emailed the transcriptions to participants

for review. Nvivo 10, a qualitative data analysis software, was used to code and analyze themes from the participants' transcribed interviews (Abrams, 2013).

Overarching themes from the data analysis included: (a) the horse-human relationship, (b) building of trust, (c) engaging mentally and physically, (4) nonverbal communication, (5) emotional safety, and (6) a faster vehicle for change. The horse-human relationship theme was apparent in almost every response participants gave. Subthemes of the horse-human relationship included (a) having a previous connection with horses, (b) EFP requiring less conversation, and (c) having a sense of mastery. One participant (therapist) reported,

> "…they have the opportunity to practice right in the arena the skills that they need to be working on with humans and in their daily lives [sic]. They're getting immediate feedback from the animals about their approach. So, if they're going to be aggressive, the horse is going to react to that, either aggressively back, or they're going to retreat. And they can see that and we can point that out immediately. And then, they have the opportunity to change." (Abrams, 2013, p. 128).

This part of the relationship is where counselors-in-training may become aware of how their presence and nature of interaction makes others feel. In a classroom setting, a supervisor or faculty member may point out ways they could alter their approach to clients, however in the EAL workshop they may truly experience other ways of being that give them a more positive interaction experience.

Subthemes of the second overall theme, building trust, included: (a) use of nonverbal communication; (b) "horse[s] as attachment figure[s], (c) "horse as [a] co-therapist;" and (c) importance of "emotional safety." (Abrams, 2013 p. 129). One of the participants described how horses experience and communicate emotions:

> "If two horses get together and one of them tries to take the other one's food, you get ears back and kicking and, you know, the message behind that emotion is, "you're in my food, Sparky...get out of there" and that's it. And then they go back to grazing. Anger doesn't have to be this big deal, and it's not a bad thing. It just says somebody violated your boundaries." (Abrams, 2013, p.130).

This message can help a counselor-in-training experiencing performance anxiety or other strong emotions with clients or in supervision to separate themselves from their feelings and see it as a reaction to something instead of "who they are." This can even be accomplished without the counselor-in-training being able to identify what emotion they are feeling through the interaction with horses since horses read and respond to the subtle nonverbal cues of the person and words are not needed to describe the emotion.

Other subthemes related to EFP, as opposed to traditional talk therapy, included: (a) clients experienced less stigma when seeking help, (b) clients had increased time for emotional processing, problem-solving and self-processing, (c) clients experienced the horses as non-judgmental which increased clients' motivation to interact, and (d) EFP was useful as a complementary or augmentative therapy (Abrams, 2013).

Abrams (2013) points out that "Working out problems with the help of a horse is less stigmatizing than sitting in front of a therapist in an office" (Abrams, 2013, p. 143). For counselors-in-training this can be translated to the feedback they receive from the horse versus from an instructor or supervisor during class or supervision. Allowing counselors-in-training participants to try different approaches until one works with horses decreases negative feedback and quickly transforms the interaction into a mastery experience. Further, the experience permits more time for emotional processing of feedback, since no immediate verbal feedback is required

with the horse. The mastery of skills that counselor-in-training participants gain from the EAL experience can be extended to client sessions and processed in supervision.

Dyk et al. (2013) explored whether a one-day intervention with horses would enhance expert nurses' emotional intelligence. Dyk and colleagues (2013) hypothesized that nurses who participated in an equine assisted learning (EAL) workshop would develop higher emotional intelligence (EQ) competencies than nurses not participating in an EAL workshop. They also hypothesized that higher EQ in nurses would positively impact patient outcomes and participants' professional development.

A volunteer sample of 21 expert nurses (minimum of 5 years of experience) was recruited through an email announcement. Participants were from the Trauma Acute Care/Surgical Service Line unit ($n$ = 11, treatment group) and Neuroscience Surgery Service Line unit ($n$ = 10, control group). To minimize the social threat of discussing the treatment during the time between pre- and post-assessments, the groups were unit based. No other participant demographic information was provided.

Study instrumentation included pre-post administration of the *Emotional Intelligence Appraisal™: The Me Edition (EIA)* and qualitative interviews with participants in the treatment group only. The *EIA* provides an overall EQ score and four skills scores: (a) self-awareness: the capacity to "accurately perceive" and "remain aware" of one's emotions as emotions occur; (b) self-management: the capacity to use emotional awareness to "stay flexible and positively direct" one's behavior; (c) social awareness: the capacity to accurately read and understand others thoughts and feelings/emotions; and relationship management: the capacity to use self-awareness and social awareness to communicate clearly and manage conflict effectively (Bradberry & Greaves, 2011, p. 5). The reliability of the four skills scores are strong with coefficient alphas

that range from 0.79 to 0.92. Furthermore, the skills are predictive of job performance with regression analysis showing significance at the 0.001 level (Bradberry & Greaves, 2011). The qualitative questionnaires were completed immediately following the EAL intervention and 3 months post the intervention.

The one-day EAL intervention was led by two certified Equine Experiential Education facilitators and two horse handlers. Participants completed a *Welcome, Introductions and Emotional Intelligence Overview* session and six exercises, none of which included riding. The five exercises were (a) *You Said What with Your Body? The Importance of Non-Verbal Communication,* (b) *Primum non nocere* - "First, do no harm", the "Hippocratic oath" - Safety Check, (c) *Sphere of Influence Ex*ercise, (d) *Leadership is Attractive,* (e) *Patient Care Corral,* (e) *The Revolving Door - Intra-Departmental Communication*. The types of horse/human interaction include: "direct observation of horses, haltering, leading horses, taking the vital signs (respiration and heart rates) of a horse, as well as working with horses at liberty (no physical contact with ropes) in an arena or round pen" (Dyk et al., 2013, p. 8). The debriefing group was held after each exercise and the EAL activities were connected to work challenges and action plan development.

Study results found that pretest EQ scores for the treatment and control groups, across all skill score ranged from 55.5 to 97 (on a 100-point scale) with the average score for both groups being in the low 70s which suggested a need for improvement. The pretests showed no significant differences between the treatment and control groups. Post-tests means scores revealed that the control group stayed comparatively the same across all 4 skills scores, while the treatment group mean skills scores increased. More specifically, "the *Overall EQ* change score for the intervention group was higher at +4.1 points, than for the control group at -0.9 points"

(Dyk et al., 2013, p. 10). The difference in scores on *Relationship Management* skill scores were notable, as the control group's mean score was 69.2, and the treatment group's score was 78.6, with a change of -2.4 for the control and 8.2 for the treatment. The treatment group's mean score for *Social Competency* skill score also changed a significantly higher amount than the control group's (-.07 versus 6.3).

Qualitative analysis of post-treatment interviews with participants in the treatment group found improvements in self-awareness, awareness of the importance of non-verbal communication and body language, social awareness, and influencing others, self-management, relationship management, and application to work. During six-month follow-up contacts, participants reported continued use of the skills learned during the EAL intervention.

Limitations of this study include the use of a small sample (due to the cost/scheduling concerns of getting participants to the farm), lack for randomization of groups, the use of self-assessment, and inability to explore patient outcomes due to cost factors. Despite these limitations, the study's findings support the addition of an equine assisted intervention to improve helping professionals (i.e., nurses) self-awareness, self-management, social awareness and relationship management (Dyk et al, 2013).

The current study is the first to examine the effectiveness of equine assisted learning (EAL) as a supervision intervention for counselors-in-training. However, this author located one peer reviewed study, which focused on animal assisted supervision. Stewart, Bach-Gorman, Harris, Crews, and Chang's (2013) pilot case study examined the impact of a therapy dog on the supervisory working alliance of counselors-in-training. Participants were 2 females completing their practicum and internship requirements. One participant was a 30-year-old Haitian American who reported struggling with relationship building skills with clients due to her perfectionist

nature. The other participant was a 25-year-old Caucasian American who reported having difficulty maintaining boundaries and being assertive with clients.

The animal assisted therapy in counseling (AAT-C) intervention included the use of the author's therapy dog, Sophie, in supervision. For the participant with boundary and assertiveness issues, obedience training with Sophie was introduced in supervision. This participant's task was to give Sophie commands until she followed the instructions. The participant could use immediate feedback from Sophie to change the way she was giving commands. Through these interactions, the participant increased her assertiveness communication and boundary setting skills, which led to her understanding how these skills lead to clear, authentic interactions.

To intervene with the second participant who was struggling with relationship building skills and perfectionism, Sophie was directed to set on the participant's feet during some supervision sessions. During these sessions, the supervisor discussed this behavior as the dog showing "love and support" toward the participant. The participant then shared her own struggles connecting with people in her personal life and how this struggle was influencing her counseling of clients. Further, this participant reported that the nonverbal support and attention from Sophie helped her realize that being present and empathetic with clients was more important than perfectly performing counseling skills. Interestingly, this participant was able understand this experience from a counselor perspective when Sophie sat on the feet of a client in a group therapy session.

Both participants reported the dog gave in-the-moment, accessible and congruent feedback, which was more translatable to their clinical work than supervisory feedback alone. The author reported the dog was a catalyst for the growth of the supervisees in the study.

Although Stewart et al. (2013) pilot study is based on the self-report of two participants, the findings offer evidence of animals enhancing the supervision process.

The conceptual article on animal assisted supervision interventions discusses how the increased relational dynamic of the animal may increase supervisees' receptivity to feedback, self-growth, inclination to try new skills, and ability to recognize what soothing techniques individuals may use in times of uncertainty. Owenby (2017) utilizes Chandler's (2017) eight benefits of animal assisted therapy and relates them to the supervision process. These are "(a) motivation, (b) distress tolerance, (c) alternative form of nurturance, (d) physical soothing, (e) genuine acceptance, (f) interactional enjoyment, (g) increased trust, (h) increased encouragement to overcome barriers" (Owenby, 2017, p.146). For motivation, Owenby (2017) discusses how the desire to interact with the animal can increase motivation for supervisees in attending and being invested in the supervision process. For distress tolerance, the animal may increase self-acceptance, resiliency, and healing which in turns supports empathy toward others (Owenby, 2017). For the third benefit, alternative form of nurturance, and fourth, physical soothing, he discusses how the presence of the animal makes these otherwise inappropriate soothing techniques available in supervision. The fifth benefit, genuine acceptance, is more easily accepted by a supervisee from an animal than a supervisor and thus can facilitate the process of alliance building as the animal reduces the number of barriers supervisee brings to the relationship. The sixth benefit area is interactional enjoyment, which carries over to the enjoyment of the supervisee in interacting with the animal in a supervision session. The seventh benefit area is increased trust, and as the supervisee sees the animal trusts the supervisor, they may in turn trust the supervisor more. The last benefit area, increased encouragement to overcome barriers, is demonstrated when the animal becomes the vehicle through which the

supervisee is stimulated to change. An animal's reaction to a supervisee can be the facilitator for this change.

In summary, there are few publications exploring the effectiveness of animal assisted interventions in supervision to date. However, psychotherapists report the use of horse in counseling increases clients level of trust, engagement, nonverbal communication, and emotional safety. When compared to talk therapy, an equine assisted therapy intervention was a faster vehicle for change (Abrams, 2013). Moreover, a one-day equine assisted learning intervention increased the emotional awareness/intelligence in nurses. Nurses and counselors have a similar skill set (e.g., active listening, relationship building and goal setting with patients/clients) which suggests EAL interventions may be helpful for counselors-in-training. When exploring the use of animal assisted supervision with counselors-in-training, the addition of dog enhanced the supervision. The addition of an equine assisted learning intervention has the potential to enhance the supervision experience in unique ways due to the specific characteristics of the horse.

### How Interactions with Horses Influence Participants Behavior

Learning styles are changing, and most counselors-in-training are a part of the millennial generation. This generation tends to seek experiential learning opportunities that offer immediate, individualized feedback, and opportunities to practice new skills (MacSweeney, 2012; Meola, 2016; Silverman, 2012). Further, research shows that when learning new information in typical management trainings, only 10% of the information is retained one year following the training (Silverman, 2012). However, EAL programs provide skill retention longer than typical management programs (Dyk et al., 2013, Meola, 2016). An in depth look at horses as social (herd) prey animals explains how horses aid counselor-in-training participants in the development and retention of new skills.

## Prey Animal Characteristics and Equine Assisted Learning Participant Skills Development

As prey animals, horses depend on their herd for survival. The natural herd instinct is to seek out a leader for protection from harm (Kohanov, 2007; Maziere & Gunnlaugson, 2015; Rector 2005; Strozzi, 2004). Horses assess new members for leadership potential and determine that member's role in the herd. This role assessment is referred to as social hierarchy (Maziere & Gunnlaugson, 2015). When counselor-in-training participants of an equine assisted learning supervision intervention (EAL-S) are introduced to the herd, the horses immediately assess them as new herd members. The horses react strongly to the smallest change in the participant's body language, body position, intent, and verbal cues. Therefore, when counselors-in-training engage in EAL interventions they increase their awareness of verbal and nonverbal communication. This awareness can then be translated to improving communication skills with clients in counseling.

Prey animals, such as horses, live in a state of "deep listening" to be fully aware of any dangers in their present environment (Maziere & Gunnlaugson, 2015, p .3). This allows them to instantly react to sudden changes in the environment such as a surprise attacks by predators. This state of deep listening is likened to a state of mindfulness in humans. During EAL interventions, horses model living in the present moment and adapting to the fluidity of the environment for participants (Maziere & Gunnlaugson, 2015). This deep listening state allows horses to bring to surface non-visible emotions that humans are experiencing, as Chandler (2016) says, "making the invisible available for consideration and processing" (p. 2). Performance anxiety can be one of these invisible feelings that counselors-in-training experience but are not outwardly aware of in-the-moment.

The EAL farm environment, with its dirt, manure, fresh grass, flies and warm fuzzy live animals, differs from a classroom or the clinic environment. Having positive learning experiences in this novel, but often anxiety-provoking, environment assists in the retention of new skills (Dyk et al., 2013; Kohanov 2013; Meola, 2016; Roberts, 2000; Strozzi, 2004). Being in a "natural" environment helps counselor-in-training participants let go of everyday distractions such as school, work, mobile phones, and laptops and focus on how they are feeling (Askin, 2008). Novel experiences also encourage less cognitive processing and more instinctual responses as new hands-on tasks, such as picking up a horse's back hoof, are introduced (Hallberg, 2008). Bonding with horses can help participants calm their emotional state to get a positive relational response (Chandler, 2016). Counselors-in-training may be able to replicate this positive relational response with clients.

Counselor-in-training participants tend to be more receptive to feedback from horses than humans partly due to the animal-human bond (Silcox et al., 2014). That is, counselor-in-training participants experience feedback from horses as "real" due to horses' nonjudgmental nature and lack of prior knowledge/interaction with participants. Horses evaluate counselor-in-training participants' decisions/behaviors on effectiveness, rather than social acceptability. Horses also respond to feelings in the same manner. Feelings, such as performance anxiety or uncertainty, become tools to access for safety and well-being rather than being socially acceptable or unacceptable. The lack of social judgment allows participants to be responsive to feelings rather than reactive.

The natural characteristics of horses which elicit change in counselor-in-training participants are discussed in detail in the next section. More specifically, how working with

horses in a novel setting improves participants: (a) communication skills, (b) openness to feedback, (c) understanding social hierarchy, and (d) mindfulness is discussed.

**Experiencing the Equine Assisted Learning Supervision Environment**

As previously mentioned, counselors-in-training tend to be motivated by external factors, such as grades, peer relationships, and professor/supervisor evaluations (Ronnestad & Skovholt, 1993). For counselors-in-training who do not regularly spend time with horses, the opportunity to meet and form relationships with horses is a novel one. On the farm, counselors-in-training will learn to stay in the moment, respond to changes in the environment, and read non-verbal cues of horses. The motivation is developing mutual communication and relationships with horses. The skills learned on the farm can be transferred to counseling sessions with clients.

Horses do not perceive "what if" scenarios, only "what is" in the moment. Furthermore, horses constantly evaluate the "objective environment", the "actions" and the "personal agency" (e.g., feelings) in their current situation (Roberts, 2000). As previously discussed, these three components comprise the *triadic reciprocal causation* process (Kincade, 1998; Larson, 1998). The triadic reciprocal causation process with horses is similar to how experienced clinicians respond to the dynamics of client-counselor and supervisor-counselor situations. Therefore, interactions with horses can help counselors-in-training become more aware of what is going on around them and what they feel in the moment rather than being in a perceived state of worry of "what if".

*Round Pen Work* is an example of a horsemanship-based EAL-S activity that supports the SCMCT triadic environment. *Round Pen Work* includes a counselor-in-training participant entering a circular-shaped enclosure with a loose horse. The horse is sent around the pen until the horse signals (e.g., by lowering of head, looking at participant, chewing, and licking) he/she

would like to come to the middle of the enclosure. The purpose of *Round Pen Wo*rk is to achieve join-up from the horse (Roberts, 2000; Strozzi, 2004). Join-up is the horse's way of communicating, "I accept you and am willing to communicate and follow." This is shown by the horse entering the middle of the round pen when signaled by the counselor-in-training participant and allows the counselor-in-training participant to make physical contact with him/her (Roberts, 2000). Once the hierarchical nature of the relationship is clear (i.e., human is leader), the horse and counselor-in-training participants are asked to become partners in other tasks such as *Horse Handshake*, *Active Leading*, and *Grooming for Connection*. Typically, participants observe facilitators completing the round pen work before entering the pen themselves.

The success of join-up relies on the counselor-in-training participants' ability to observe and respond to the horse's actions. The horse's actions, which are never completely predictable, dictate the decisions and involvement of the counselor-in-training participants and the facilitators. For example, if a horse gets too excited, despite a calm demeanor displayed by the counselor-in-training participant, the facilitator may have to step in or the environment may start to feel unsafe. The facilitator's level of involvement (i.e., too much or not enough) can also affect the outcome of the experience. Another unpredictable factor that may affect the experience is the horse's mood. For example, horses tend to be more reactive in high winds. These environmental factors are processed after the EAL session and related back to the triadic reciprocal causation process, the counseling process, and the supervision process.

**Equine Assisting Learning as a Metaphor for Counselor-in-Training Development**

Facilitators use the equine assisted learning (EAL) experience as a metaphor for skill development (Meola, 2016). For example, counselor-in-training participants in a round pen with a horse will feel the need to assess the situation through self-awareness checks of their body

language and tone of voice. If counselor-in-training participants experience heightened performance anxiety with the horse, their bodies may become rigid, their breathing may become shallow and rapid, and their attention may be focused on how to get out of the situation with limited damage. Because of the counselor-in-training participants' heightened performance anxiety and lack of attentiveness, the horse may become keyed up or ignore the counselor-in-training participants since their attention is not focused on the horse.

If the counselor-in-training participants are unable to adapt to the situation on their own, facilitators may encourage them to notice their body language and to focus only on the horse. Once counselor-in-training participants relax their body, slow their breathing, and focus on moving the horse, they can then work on successfully communicating with the horse. The round pen activity then becomes a metaphor for meeting new clients. More specifically, the facilitator encourages counselor-in-training participants to discuss what they have learned about their adaptability and communication skills with horses. Next, the counselor-in-training participants are encouraged to discuss how they can use their adapting and communicating skills in counseling situations/environments.

Working through novel situations with horses (e.g., *Round Pen Work* activity) provides counselor-in-training participants the opportunity to try new experiences without the external pressures of grades. If their first attempts are not successful, counselor-in-training participants are supported by facilitators to try something different until success is achieved. Horses are firmly grounded in the present with a "limited capacity to judge" (Chandler, 2016, p.1). When participants change their behavior in accordance with the facilitator's prompting, horses will change their reaction to form a positive alliance. This process mirrors the initial sessions with clients. More specifically, there is a trial and error process to establishing therapeutic rapport

with new clients (Bernard & Goodyear, 2014; Schwing et al. 2011). Building on successes (e.g. positive interactions with horses) helps increase counselor-in-training participants' counseling self-efficacy (Bandura, 1977; Larson, 1998). As previously discussed, counselors-in-training with increased levels of counseling self-efficacy are open to new experiences and are persistent in the face of failure, which leads to greater success when counseling clients (Larson & Daniels, 1998).

In counseling, the relationship process is often long-term and nonlinear. Successes (i.e., mastery experiences, Bandura, 1977) are sometime difficult to recognize. However, successful completion of EAL-S interventions are identifiable mastery experiences for counselors-in-training. Upon completion of the EAL activities, facilitators assist counselor-in-training participants in relating the experience to counseling and supervision.

**Communication and performance feedback.** Communication flexibility is key to counseling due to the ambiguous, nonlinear aspects of the counseling process (Meola, 2016; Skovholt & Ronnestad, 2003). Nonverbal communication is as important as verbal communication between clients and counselors. Learning to be adaptable in one's communication style and nonverbal communication is developed in an efficient manner while working with horses (Roberts, 2000; Strozzi, 2004).

As previously discussed, Bandura's social cognitive theory (SCT) found that performance feedback strongly influenced self-efficacy. Self-efficacy is related to performance feedback by supervisors, which can change a supervisee's perspective on their own performance (Daniels & Larson 2001). Feedback is best received and used to enhance performance when it is both positive and constructively critical, and based on changeable aspects of the counselor-in-training. Feedback from the equine during EAL is considered nonjudgmental since the feedback

is based on participants' current choice of actions, feelings, and verbal and non-verbal cues. This provides counselor-in-training participants with on-the-spot opportunities to change their actions/feelings to obtain positive outcomes with the equines. Furthermore, counselor-in-training participants can maintain their counseling self-efficacy by working with the equines on areas of weakness rather than receiving formative evaluation by a supervisor.

For example, a counselor-in-training who is worried about having poor boundaries with clients may become defensive if a supervisor brings this up. "I've noticed you let the client ramble on without bringing her back for several minutes". A horse will tell the counselor-in-training participants they have weak boundaries by ignoring their requests, invading their personal space, or by pushing past them while leading. When this occurs, a facilitator would translate what the horse is communicating by saying to participant "Cody (the horse) is really not respecting your personal space. I wonder why that is? What could you change right now to get more respect for your physical boundaries from Cody?" Boundary lessons learned from Cody can then be related to boundary issues with clients. Participants may be more likely to respond positively to the horse and facilitator's translation than to the supervisors' feedback.

Over the course of a semester, supervisors may point out instances where counselors-in-training have communicated something with their body unintentionally (e.g., moving one's hands too aggressively or not using eye contact successfully) in session. Counselors-in-training may or may not understand what effect their behavior had on clients or may doubt the correctness of what supervisors are saying. If counselors-in-training have low counseling self-efficacy, they may interpret this feedback as an insult or as something they cannot change.

In an EAL intervention, horses provide instant feedback to counselor-in-training participants' body language, and as participants change their nonverbal language, horses

respond accordingly. For example, if the counselor-in-training participant stares directly at the horse's flank area and uses large hand movements, the horse tends to experience this as predator behavior and may try to get away from the person. If the counselor-in-training participant moves their eye contact to a less threatening location (e.g., horses' shoulder or the ground) and calms their hand movements, the horse will tend to cue in and calm down. Counselor-in-training participants are provided immediate feedback on their body language and learn that they can change their body language to achieve success (a mastery experience) in relationship building.

**Emotional resonance and awareness.** As previously discussed, horses live in a state of deep listening and are acutely aware of changes and possible dangers in their environment (Maziere & Gunnlaugson, 2015). Horses can read subtle cues of predators (and other beings) before external changes in the predators' body language occur. This ability can be referred to as being able to read the "internal state" of the being (Maziere & Gunnlaugson, 2015).

Emotional incongruence is a predator tendency- imagine a mountain lion creeping through the tall grass to a horse watering hole, trying to "appear" calm and disinterested while they get close enough to pounce on an "unsuspecting" horse. This explains why a horse will be at the least disinterested and, more likely, scared and agitated if a person is emotionally incongruent. Sometimes, people are unaware of their emotional incongruence. For example, they may project self-confidence when in fact they are nervous or suffer from low self-esteem. An example in counselor supervision and education would be, a counselor-in-training who is afraid of "making a bad grade" or of "messing up a client" and instead of addressing their concerns, they project a higher level of counseling self-efficacy to themselves and to their supervisor. Now place that counselor-in-training (with his or her projected high counseling self-

efficacy) in a situation where he/she is asked to lead a horse over a crinkly, brightly colored tarp. The horse feels there is a hesitation in the counselor-in-training, that they are in essence "slinking through the tall grass" hoping no one (including themselves) notices their lack of confidence. Instinctually the horse picks up on this and does not want to follow the counselor-in-training onto the scary obstacle. Upon realizing the horse is cautious about walking over the tarp with this person, the facilitor might give the counselor-in-training the option of trying again or backing off and working on building exercises with the horse before trying again. If the counselor-in-training decides to work on relationship building with the horse, the facilitator may discuss congruency of body language, or ask questions like "On a scale of 1 to 10, how confident are you that the horse will follow you over the tarp?" or may even dive in further and ask "How are you feeling right now after the horse would not follow you; how does your body feel?"to initiate some emotional awareness. If the counselor-in-training decides to continue on his/her task of getting the horse across the tarp, the facilitator may ask, "What are you going to do differently this time that will change the results?" or "What is the horse's body language telling you about why they are not following you?". Either way, the counselor-in-training is becoming more aware of his or herself, the horse, and therefore emotional congruence and emotional awareness. This experience can be translated to work with "difficult" or "resistant" clients.

Horses respond positively toward humans who are emotionally resonant, meaning their external behavior and internal feelings match. For example, counselor-in-training participants who are nervous and verbalize "I am a little nervous" will find horses generally receptive to forming a relationship with them, as their internal state matches their external body language and cues. However, if the counselor-in-training participant is nervous but tries to portray

confidence bodily and verbally, the horses are less receptive to forming relationships. Horses easily read through defensivesness and false projections of emotions. Being aware of emotional resonance increases counselor-in-training participants' congruence, mindfulness, anxiety control, and awareness of how their presence impacts others. Just as horses use body language, mood, and current emotional state as data and react accordingly, successful counselors do the same with clients.

**Social hierarchy and boundaries.** As previously discussed, horses rely on the herd hierarchy for survival (Maziere & Gunnlaugson, 2015; Roberts 2000; Strozzi, 2004). Every member has a role and if one fails in his/her role, the entire herd's survival is at stake. Leaders in the herd serve to protect the herd from predators. The leader's ability to react to the environment accurately determines the safety of the herd, which means there is little room for doubt in herd hierarchy. Therefore, the herd has clear boundaries, communication, and social hierarchy.

Clear communication and boundaries are also integral to positive counselor-client and supervisee-supervisor relationships (Bernard & Goodyear, 2014). Therefore, the herds' development of relationships is a metaphor for client-counselor-supervisor relationships. Being aware of each role's importance and responsibilities and having clear boundaries leads to effective counseling and supervision (Bernard & Goodyear, 2014). Being able to respond quickly and effectively to the ever-changing dynamic of the client-counselor relationship is also a skill successful counselors' exhibit (Larson, 1998).

Horses tend to keep long-term relationships with one another with little conflict in the wild (Hallberg, 2008). Hallberg (2008) states, "horses survive because of their close interpersonal relationships and the ability to maintain a system of communication and relationship building that promotes relative inter-herd peace versus interspecies violence" (p.

94). Often this social hierarchy is maintained by boundary setting. All horses know their role in the social hierarchy, and to maintain their role, they abide by the herd's rules. For example, when approaching a new water hole, the lead mare approaches first and signals to the herd "all clear" or "danger". If a young herd member decides to bound forward and check out the water hole on his own, he may carelessly awaken a predator that threaten the whole herd's survival.

Horses, like humans, test the boundaries of the social hierarchy. Occasionally a herd member may challenge a higher-ranking horse by trying to steal his food or enter his grazing space. The higher-ranking horse must react aggressively to remind the horse of the hierarchy. The testing of the boundaries in horses becomes a metaphor for boundary testing/setting with co-workers and clients. For example, if a co-worker or client invades a counselor's-in-training personal space or "steps on his/her toes" during staff meeting or in a session, this behavior is often tolerated until a strong negative reaction occurs to stop the situation. However, if a 1000-pound animal invades the space of a counselor-in-training participant, the participant is likely to learn how to say no or back off, before the animal "steps on his/her toes" (Whittesley-Jerome, 2014). This opportunity provides counselor-in-training participants the mastery experience of saying no in a firm but appropriate way while maintaining positive relationships (Bandura, 1977).

Choice of actions also dictates boundary setting and maintenance between horses and between horses and humans. The SCMCT discusses a counselor-in-trainings' choice of actions affecting the client-counselor dynamic and the counselor-supervisor dynamic (Larson, 1998). The counselor-in-training's choice of actions with the horse in EAL determine the horse's response to a situation as well. For example, conside the experience of a counselor-in-training with low counseling self-efficacy attempting to lead a horse out of his grass paddock. The horse

is chomping on the grass with no regard to the light tugging on the lead rope by the counselor-in-training. The counselor-in-training then attempts to coax the horse verbally, and by patting it lightly on the neck. A facilitator may then explain the counselor-in-training that those actions may actually be rewarding the horse for ignoring and there may be other options to obtain the horse's attention. Some of the options, such as giving quick repetitive forceful tugs on the lead rope may be outside the less assertive counselor-in-training's comfort zone. This may seem confrontational or aggressive to the counselor-in-training. The facilitator could ask the counselor-in-training after trying out this new, more forceful action, how the horse is reacting to the counselor-in-training now- are they mad, scared, more respectful, or indifferent? Most likely the counselor-in-training will report the horse was more respectful or that they were more attentive to the counselor-in-training. Instead of feeling like the counselor-in-training displayed a lack of confidence/leadership ability with the horse in front of peers, the counselor-in-training can now experience postive feelings due to displaying adaptability, insight, and emotional awareness of his/herself and the horse. This experience could then be related to client situations. For example, the counselor-in-training may be tentative in pushing clients to discuss uncomfortable topics when the client would rather "graze" in their comfort zone.

**Counseling Self-efficacy and performance anxiety.** Successfully influencing a large, intimidating horse to follow one's directions (e.g., Round Pen activity) is an empowering experience, which may increase one's belief in his/her ability to perform tasks, communicate with others, fully commit to challenging situations, and to react in the moment. During the equine assisted (EAL) intervention, counselor-in-training participants have multiple opportunities to practice their communication skills when they complete tasks with the horses. Successful task completion (mastery experiences) builds counseling self-efficacy throughout the

EAL intervention. Following the EAL experience, the facilitator and counselor-in-training participants process the EAL experience and relate EAL to counseling self-efficacy. Equine assisted learning supervision activities and processing questions are discussed in detail in Chapter 3.

To increase self-efficacy and gain mastery of a skill, "mastery experiences" are the most effective mechanism (Bandura, 1982; Larson, 1998; Larson & Daniels, 1998). Mastery experiences are directly related to higher levels of counseling self-efficacy, and in the practicum experience, sometimes it is difficult for counselor-in-trainings to feel they had these experiences. This is due to barriers such as low counseling self-efficacy, client no-shows or turnover, high performance anxiety, limited time with clients and in individual supervision (Larson, 1998).

An EAL intervention provides multiple opportunities for counselors-in-training to have mastery level experiences. These opportunities are provided by the nature of interacting with a horse. As previously discussed, horses constantly assess the communication and actions of the counselor-in-training in the moment to determine who is in charge as part of the horse's survival instinct. This allows the counselor-in-training to try various approaches until success is achieved. Success is clear; for example, the horse approached the counselor-in-training to meet them, the counselor-in-training communicated with the horse to walk over an obstacle, or the horse showed signs of relaxation when the counselor-in-training changed their body language.

Daniels and Larson (1998) suggest that positive feedback followed by specific suggestions on how to improve "should lead to higher counseling self-efficacy, lower anxiety, and more confidence" (p.128). By the facilitator suggesting options for the counselor-in-training when a barrier presents itself, and by the horse exhibiting easy to read responses, the counselor-in-training is receiving positive feedback with specific suggestions on how to improve.

As previously discussed, performance anxiety impacts the therapeutic relationship between clients and counselors as well as the supervisory working alliance (Marmarosh et al., 2013; Meola & Sias, 2016; Ronnestad & Skovholt, 1993; Skovholt & Ronnestad, 2003). Due to the complex nature of dealing with human emotions, counseling competency takes years to create. Many times, counselors-in-training are not prepared for this complexity and thus experience overwhelming performance anxiety. This can translate into feelings of "not having the right answers" or "making the wrong decision" in session with clients (Meola & Sias, 2016; Skovholt & Ronnestad, 2003). Performance anxiety can cause counselors-in-training to turn their focus inward on worrying about their decisions and reactions instead of paying attention to the client's actions and being present with the client (Meola & Sias, 2016).

Performance anxiety also impacts the supervisory working alliance (Ronnestad & Skovholt, 1993; Schwing et al., 2011). Feelings of performance anxiety can affect the choice of discussion topic by supervisee, the tapes chosen for the supervisor to watch, as well as the mode of viewing (i.e. live feedback, video, audio) (Schwing et al., 2011). The anxious supervisee might only discuss clients that are doing well and themes they feel represent their strengths as a counselor (Schwing et al., 2011. Sometimes supervisors of counselors-in-training are newer to supervision and experience performance anxiety dealing with their supervising (Ronnestad & Skovholt, 1993). This causes them to focus on concrete things in supervision and offer solutions instead of focusing on allowing the process of learning to occur. This may all create a tension in the relationship that is not conducive to counselor-in-training growth. This can limit the development of the supervisee.

Ronnestad and Skovholt (1993) discuss the need at the counselor-in-training level for confirmatory feedback because the "realistic assessment of one's limitations may be a stepping

stone in personal and professional development of the individual" (p. 398). As discussed, EAL interventions provide immediate confirmatory feedback to the counselor-in-training on what they do well and encourage the student to step out of the comfort zone of "knowing what to do" (being comfortable with a particular method) and try some new things (Ronnestad & Skovholt, 1993, (p. 398).

Having a supervisor with enough confidence in the process to permit mistakes on their supervisees' part is integral to learning (Ronnestad & Skovholt, 1993). Allowing the trial and error process to guide the supervisee is necessary for their growth but can be difficult to watch from a new supervisor's perspective (Ronnestad & Skovholt, 1993). For example, a student may be experiencing a low return rate in clients because she is nondirective in session. The supervisor notices this in videotapes of the sessions, and suggests the student become more assertive about goal setting in the first session. The student then comes across as drilling questions to the client and looks uncomfortable in the process. The supervisor was not supportive of her attempt and criticized the execution. She followed the supervisor's suggestion and felt like she did not experience success. The supervisor did not offer positive feedback on the supervisee's efforts of incorporating a new method, possibly because the supervisor felt the faulty execution reflected her supervision effectiveness/ineffectiveness. In an EAL experience, the counselors-in-training would be allowed a trial and error experience with their own suggestions, and a means to "try it out" on the horse instead of in session with clients first. For example, the counselor-in-training may attempt to get the horse to follow them in a pattern in the ring. The horse does not walk forward and instead quietly stands there letting the supervisee pull on their halter and leadrope. The facilitator could ask, "What could you change about how you are asking the horse to have them follow you?" A few different suggestions could be made and tried by the counselor-in-

training, until something stirs the horse. The supervisee may become more assertive or may have tried to entice the horse in some way. Whatever the method, it was something the supervisee came up with as a solution and executed successfully. Equine assisted activities may be an effective way to discover new methodologies with clients as opposed to what a supervisor suggests and the counselor-in-training tries on her own with clients.

In general, being around animals in a "natural" setting helps reduce stress and anxiety (Maziere & Gunnlaugson, 2015; Silcox et al., 2014; Strozzi, 2004). Participating in an activity with a horse can also be a positive anxiety provoking experience, especially when there is a successful outcome (Maziere & Gunnlaugson, 2015). A counselor-in-training who experiences this can gain a mastery experience of feeling anxiety (performance anxiety as well as general anxiety) and managing it effectively.

**Role induction.** Bernard and Goodyear (2014) discuss unclear role induction as being a source of anxiety in counselors-in-training. Role induction refers to the process of explaining the structure of the therapeutic relationship to clients (and supervisees) and what expected outcomes look like from the process (Peters, Nestadt, & McHugh, 2014). Clear role induction contributes to more positive outcomes in clients compared to control groups where role induction was not discussed (Marquardt, Sicheneder & Seidenstucker, 1975). Role induction can apply to the supervisor-supervisee relationship as well as the client-counselor relationship. Being unclear on how the ethical guidelines of boundary issues with clients that may come up in treatment as well as being unclear on the dual relationship of the supervisor and what is being evaluated can cause high levels of anxiety (performance and general) in counselors-in-training (Bernard & Goodyear, 2014).

Unclear role induction causes anxiety with horses as well (Maziere & Gunnlaugson, 2015; Strozzi, 2004). If the horse is unclear as to who is the leader in the horse-human relationship, the horse will assume command and will not respond to the human's requests. If expected outcomes are not clear to the horse, the horse will lose interest or not respond, or worse, take control of the situation. Similarly, if counselors are ambiguous about their role and the outcomes of counseling, clients may assume command of the session (talk the entire session, ask personal questions to the counselor). If supervisees are unclear of their responsibilities and outcomes in supervision, they experience an increase in anxiety (Bernard & Goodyear, 2014).

## Implications for Future Research

Recently, there has been an explosion of research on equine assisted activities and therapies (EAAT). However, much of this research has limitations, which are common to new fields of study (Lee et al., 2016). These limitations include, the use of small samples of convenience, the lack of comparison or control groups (without another intervention), random assignment, and extended lengths of follow-up contacts, and the lack of universal quantitative outcome measures and definitions (Abrams, 2013; Knack, 2015; Lee et al., 2016; Selby & Smith-Osborne, 2015; Whittlesey-Jerome, 2014).

To address these limitations, recommendations for future research include, partnering with colleges, universities, and research foundations to advocate for funding and encouraging collaboration among therapeutic riding centers for larger and more diverse samples to produce quality studies (Knack, 2015).

## Chapter Summary

This chapter contains an extensive literature review of: (a) counselors-in-training performance anxiety and counseling self-efficacy, (b) the social cognitive theory and Larson's

(1998) social cognitive model of counselor training (SCMCT), and (c) the application of social cognitive theory/SCMCT to equine assisted learning supervision interventions for counselors-in-training. More rigorous research in the field of EAAT is essential for the field's growth, the continued incorporation with clinical populations, and the inclusion into counselor-in-training supervision. This exploratory study examined the relationship between participation in an equine assisted learning supervision intervention and counselor-in-training performance anxiety and counseling self-efficacy. Chapter 3 provides a detailed description of the methodology, instrumentation, and data analysis that was used to investigate the effectiveness of equine assisted learning supervision interventions on counselors-in-training.

# CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY

## Introduction to the Chapter

This chapter provides an overview of the current study's purpose and research questions, the population and sample, research design, the statistical analysis and research variables, equine assisted learning supervision site and intervention, a discussion of the ethical considerations, and potential limitations of this study. The chapter concludes with a summary. The following is a timeline for the study:

Figure 2

*Study Timeline*


## Research Questions

This study's purpose was to examine the effects of a one-hour equine assisted learning supervision intervention on counselors-in-training performance anxiety, counseling self-efficacy and whether the supervisor-supervisee working alliance correlates with thee variables. The *State-Trait Anxiety Inventory* (*STAI*), *Counseling Self-Estimate Inventory* (*COSE*), and *Supervisory Working Alliance Inventory* (*SWAI*) measured participants' pre-post performance anxiety, pre-post counseling self-efficacy, and post supervisor-supervisee working alliance.

The research questions were:

1. How does a one-hour equine assisted learning supervision intervention influence counselors'-in-training counseling self-efficacy as measured by the *Counseling Self Estimate Inventory*?

2. How does a one-hour equine assisted learning supervision intervention influence counselors'-in-training performance anxiety as measured by the *State-Trait Anxiety Inventory* (State scale only)?

3. What is the relationship between counselor-in-training counseling self-efficacy, as measured by the *Counseling Self Estimate Inventory*, and counselor-in-training performance anxiety, as measured by the *State-Trait Anxiety Inventory* (State scale only)?

4. What is the relationship between the quality of the counselor-in-training supervisory working alliance, as measured by the *Supervisory Working Alliance Inventory-Trainee*, and counselor-in-training counseling self-efficacy?

5. What is the relationship between the quality of the counselor-in-training supervisory working alliance, as measured by the *Supervisory Working Alliance Inventory-Trainee*, and counselor-in-training performance anxiety?

6. What is the relationship between the quality of the counselor-in-training supervisory working alliance, as measured by the *Supervisory Working Alliance Inventory-Trainee*, and the effectiveness of the equine assisted learning supervision intervention?

## Population and Sample

The target population was masters' and doctoral counselors-in-training. The sample was counselors-in-training from three CACREP accredited counseling programs in eastern North Carolina. All programs were housed in the College of Allied Health Sciences. Demographic data was collected but was not used to determine group assignment. The sample was selected from

counselors-in-training enrolled in a counseling theories course or a practicum (master's or doctoral) course.

The sample included 20 participants (10 in the treatment group and 10 in the control group). The sample size reflects the purposeful sampling of students currently enrolled in the selected courses. G*Power version 3.1.9.2 was used for an effect size of 0.5, (derived from the equine-assisted activities and therapies literature), a Cronbach's alpha of 0.05, and a power 0.8 for two groups (intervention and control). The suggested participant number was 34. The final sample is smaller due to the difficulty in recruiting and participants. Cohen's Table of Power Analysis (2003) was used to determine the power with an effect size of 0.5.

The sample size was further supported by the statistical procedure, pre-post, split-plot MANOVA. An advantage of this design is each participant provided his/her own base line comparison, which allows for a smaller sample size. Further, due to the expensive nature of this study, a smaller sample was ideal, and a smaller sample size was needed due to ethical considerations for both the participants and horses. More information concerning the statistical procedure is discussed later in this chapter.

**Selection of Participants**

Purposive sample ensures that each participant has the exact criteria relevant to the study (i.e., students enrolled in a CACREP accredited (master's or doctoral) counseling program currently participating in practicum or counseling theories courses). Random assignment was used. Random assignment means that participants are assigned to groups (experimental or control) by a random numbers generator. Random assignment ensures the groups are similar at the beginning of the study and that any change seen is due to the intervention and not makeup of the group. Random assignment also increases the study's internal validity (Trochim, 2006).

Participants assigned to control group were not offered the treatment due to financial constraints on the study.

**Research Design**

This study was a quasi-experimental design that compared participants' pre- and post-scores on the *Counseling Self-Estimate Inventory* (*COSE*), *State-Trait Anxiety Inventory* (*STAI*; state scale only) and the *Supervisory Working Alliance Inventory (SWAI)* in both the treatment (i.e., equine assisted learning supervision (EAL-S) intervention) and control group (i.e., field-site courses as usual). The study used a purposive sample rather than a random sample which prohibits it from being an experimental study.

Involvement in the study was voluntary. This researcher read a script (Appendix A) which described the study, the study's instruments (the *STAI,* the *COSE,* and the *SWAI*), confidentiality procedures, and informed consent procedures. Students who choose to participate signed an informed consent form, completed the *Demographic Questionnaire* (Appendix B), and the pre-test instruments during class time. Professors, researcher, nor students were aware of who was in the treatment or control groups. Group assignment occurred following pre-test completion. Additionally, all participants were assigned an ID number to protect their confidentiality. The post-test of the *STAI, COSE,* and the *SWAI* was administered in the same format as the pre-test. A *Debriefing Questionnaire* was also given to the treatment group (Appendix F). This survey asked participants questions about their levels of performance anxiety and counseling self-efficacy during and after the EAL session, as well as how they can relate what they experienced to counseling. They were also asked if they were interested in participating in a follow-up study.

## Equine Assisted Learning Supervision Intervention and Site

Rocking Horse Ranch is in Greenville, North Carolina and is a PATH Premier Accredited Center. All instructors are certified by PATH as registered level instructors or above. The site adheres to all protocol and safety standards of PATH International.

Although many EAL interventions are in a group format and last longer than one hour, financial and scheduling restrictions at Rocking Horse Ranch required this study to use a one-hour individual format.

### Arriving at the farm

Participants in the treatment group arrived at the farm for a one-hour individual equine assisted learning supervision (EAL-S) intervention. The intervention was offered on mornings throughout a two-month period to accommodate participants' schedules.

In keeping with PATH safety standards, participants read and signed a *Participant Safety Script* (Appendix D) regarding safety around horses and a *Participant Registration and Release Form* (Appendix C). Finally, participants signed a waiver of liability releasing Rocking Horse Ranch from any harm should participant injury occur.

Staff (facilitator and equine specialist) provided brief introductions of themselves and the role they play in the EAL-S interventions. Confidentiality was also discussed. Participants then discussed with facilitators a "time out" protocol where they signaled if they were overwhelmed or needed a break from the experience. The EAL-S intervention included: *Horse Handshake*, *Active Leading*, and *Grooming for Connection.*

**Horse Handshake**

The first activity was the *Horse Handshake*. The facilitator introduced the participant to the horse and described the horse's personality. The facilitator showed the participant how to approach a horse: holding out their hand, palm facing down, fingers bent inward. The participant then approached the horse and "greeted" the horse. Processing this experience, facilitators asked questions such as:

1. How would you describe the process of approaching and greeting the horse? What kind of anxiety was involved (physically/emotionally/socially)?
2. Was there anything you changed in your body language before the horse wanted to greet you (clenched hands, physical posture, or facial expressions)?
3. How can you use the experience of the *Horse Handshake* in relation to interactions with clients?

Depending on participants' responses or questions, the facilitator included information about the horse's personal space, boundaries, and the meaning of non-verbal cues (horse's positioning of head, ears, or tail).

**Grooming for Connection**

The second activity was *Grooming for Connection.* In this activity, participants were introduced to different grooming tools on the horse. The purpose of the activity was not to remove dirt from the horse but to note how the horse responded during the grooming process (e.g., positively, negatively or indifferent). If they found an activity the horse seemed to enjoy, they could continue with that activity. Processing this experience, the facilitator asked questions like:

1. How did you determine what the horse liked and disliked?

2. How did you change your behavior based on your horse's reactions?

3. How do you feel about the overall experience of grooming your horse?

Depending on participants' responses or questions, the facilitator included information about grounding, horse nonverbal language, and other considerations while grooming.

**Mindful Leading**

The third activity was *Mindful Leading*. The facilitator explained how to lead the horse. This included where the participant positions their body in relation to the horse and how to communicate what they would like the horse to do (e.g., move forward, turn left or right, stop). The participant then practiced leading the horse forward, stopping, and turning. The facilitator then asked the participant to answer out loud, "What are you worried might distract you when working with clients." The participant was asked to pay attention to the horse's nonverbal response to the participant while answering the question. Participants were then asked to multiply by three in their head while leading the horse. Multiplying took participants minds off building a relationship with the horse and the leading task at hand. Participants were then asked to stop multiplying and to focus their attention and intention on the horse performing the leading activity. Processing this experience, facilitators asked questions like:

1. What was the experience of leading like for you?

2. How was the experience different when you were distracted by multiplying versus concentrating on being mindful of your interactions with the horse?

3. What level of anxiety did you experience before, during, and after the activity?

Depending on participants' responses or questions, the facilitator included information about mindfulness, grounding exercises, and other considerations while leading.

## Statistical Analysis

This researcher was interested in examining the differences in participants pre-and post-*Counseling Self-Estimate Inventory* (counseling self-efficacy) and the *State Trait Anxiety Inventory* (state scale only; performance anxiety) scores as well as differences between treatment and control groups scores over time (Manley, 2005). Therefore, data was analyzed using a split-plot MANOVA. A MANOVA allowed this researcher to examine the interactions between the treatment and control groups as well as the two dependent variables (i.e., counseling self-efficacy and performance anxiety). A split-plot MANOVA was chosen over a repeated measures ANOVA due to past research supporting a negative correlation between counseling self-efficacy and performance anxiety in this population. When dependent variables have a moderate to high correlation, such as counseling self-efficacy and performance anxiety, a MANOVA is more suitable than a repeated measures ANOVA (French, Poulsen & Yu, 2002). A Pearson product-moment correlation was used to analyze the correlations between counseling self-efficacy and anxiety, and between the quality of the supervisory working alliance and the effectiveness of the treatment. Although participants' responses on the *Debriefing Questionnaire* were not analyzed, information is used from the *Debriefing Questionnaire* which supports the quantitative data.

## Instrumentation

This study utilized three instruments as pre-and post-test measures of counselors'-in-training performance anxiety and counseling self-efficacy. The *State Trait Anxiety Inventory* (*STAI;* state scale only) was used to measure state and trait anxiety of participants. The *Counseling Self-Estimate Inventory* was used to measure participants counseling self-efficacy. The *Supervisor Working Alliance Inventory-Trainee Form* was used to measure supervisor-supervisee working alliance. A *Demographic Questionnaire* was distributed as well. Following

the EAL-S intervention, participants in the treatment group completed a brief questionnaire on their experience at the farm.

**State-Trait Anxiety Inventory**

The *State-Trait Inventory (STAI)* is a self-report questionnaire, consisting of 40-items and two subscales: (a) *State Anxiety* and (b) *Trait Anxiety* (Julian, 2011; Mehr, Ladany, & Caskje, 2015). For the purposes of this study, only the *State* scale was used. State anxiety is situational or current anxiety, including feelings of "apprehension, tension, nervousness, worry, and activation/arousal of the autonomic nervous system" (Julian, 2011, p. 2). The *STAI* was administered pre- and post- to measure change in anxiety levels of participants. The state anxiety subscale scores measured participants' performance anxiety. Due to the time span (four weeks or less) between the pre- and post-STAI, the state or situational/current anxiety was used in the statistical analysis. The state scale is referred to *STAI-S*.

**Administration and scoring.** Questions on the *STAI-S* asks participants to rate their state (situational/performance) anxiety on a Likert scale from 1 = "Not at all" to 4 = "Very much so". Higher scores indicate a higher level of anxiety. As discussed above, the responses on the *State* subscale are asking about "in the moment" anxious feelings (Julian, 2011). The *STAI-S* scores can range from 20 to 80, with a general cutoff of 40 or higher as clinically significant (Julian, 2011). The *STAI-S* takes 10 to 20 minutes to complete (Spielberger, 1983).

**Background and norms.** The *STAI* in its entirety is a popular inventory in a variety of fields, including psychology, medicine, education and other similar fields (Spielberger, 1983). The *STAI* in its entirety was first published in 1970, was updated in 1983 and has been adapted in more than 40 languages (Julian, 2011). There are several normative groups for the *STAI* in its entirety, including adults, children, military veterans, and psychiatric samples (Julian, 2011).

The *STAI* is highly correlated with measures of personality attributes related to anxiety (Mehr et al., 2015). The test-retest reliability of the *STAI* in its entirety was tested on time intervals ranging from 1 day to 104 days (Julian, 2011), and the result were .65 to .75 over a 2-month interval (Spielberger et al., 1983). As for the scales, the lower test-retest coefficients are on the *State* scale, which is expected because it measures situational or current anxiety levels.

The internal consistency co-efficient ranged from 0.86 for the high school students to 0.95 for military recruits (Julian, 2011). The *State* subscale ranged from r = 0.16 to 0.62 (Spielberger, 1983). In this study, Cronbach's alpha for the *STAI-S* pre-test was $\alpha = 0.89$ and for the post-test was $\alpha = 0.95$

**Validity.** The *State-Trait Anxiety Inventory (STAI)* subscales are conceptually distinct and therefore correlations differ depending on the population of study (Julian, 2011). However, the *STAI* in its entirety was normed on more than 10,000 adults. When compared to other commonly used anxiety instruments (i.e., *Taylor Manifest Anxiety Scale, Cattell and Scheier's Anxiety Scale Questionnaire*), the content validity of the *STAI* in its entirety was between 0.73 and 0.85 (Julian, 2011). In terms of discriminant validity, the *STAI* is highly correlated with measures of anxiety and depression (Julian, 2011). The construct validity and the proximity of measuring anxiety, depression, and other mood disorders is a limitation of the *STAI*. Further, when assessing the elderly with and without anxiety disorders, the *STAI* discriminant validity was low (Julian, 2011).

**Counseling Self-Estimate Inventory**

The *Counseling Self-Estimate Inventory* (*COSE*) is a 37-item questionnaire that measures counseling self-efficacy (Daniels & Larson, 2001; Larson, Suzuki, Gillespie, Potenza, Bechtel &

Toulouse, 1992). Counseling self-efficacy refers to "one's beliefs or judgments about her or his capabilities to effectively counsel a client in the near future" (Larson & Daniels, 1998, p. 180).

**Administration and scoring.** When administering the *COSE*, participants are asked to rate their ability to successfully complete counseling tasks on a 6-point Likert scale (1 = Strongly Disagree to 6 = to Strongly Agree). The higher the *COSE* score, the greater the counseling self-efficacy.

The *COSE* includes five subscales: (a) micro-skills, (b) process, (c) difficult client behaviors, (d) cultural competence, and (e) awareness of values (Daniels & Larson, 2001; Larson et al., 1992). Scores on the subscales range from 0 to 45 and the total *COSE* score ranges from 37 to 222 (Cashwell & Dooley, 2001). Larson recommends only using the total score as the psychometric properties are higher than the subscales (Larson, 1992).

**Background and norms.** To develop and validate the *COSE,* Larson et al. (1992) conducted multiple studies. The Study 1 focused on scale construction, factor analysis procedures, and the testing of convergent and discriminant validity. After testing various forms of the inventory, a 67-item version of the *COSE* was administered to 213 master's students (159 women, 53 men, and 1 person who did not indicate gender) in an introductory counseling course. Participants were enrolled at one of two universities, one located in the Midwest and the other in Hawaii. Participants' age range 20 to 50 years, and the sample was 83% Caucasian, 14% Asian, and 3% other (Larson et al., 1992). One group of these participants ($n$= 51) completed the *Tennessee Self Concept Scale (TSCS),* the *Problem-Solving Inventory (PSI),* the *STAI,* and the *Social Desirability Scale (SDS).* Another group ($n$ = 30) completed the *Myers-Briggs Type Indicator (MBTI),* and a third group ($n$= 27) reported their undergraduate GPA and GRE scores (verbal and quantitative). All participants took the 67-item *COSE*.

When analyzing participant demographics (i.e., age, race, gender) and *COSE* scores, no significance in scores was found (Larson et al., 1992). As for the factor analysis of the 67-item *COSE*, 14-items were eliminated because of a lack of variance. A second factor analysis was completed on the remaining 53 factors, and the results supported the use of the total *COSE* score due to an underlying counseling self-efficacy factors. Additionally, the *COSE*'s five factors (subscales) were determined (*Micro-Skills, Process, Difficult Client Behaviors, Cultural Competence*, and *Awareness of Values*. The *Microskills* subscale included 12 questions with factor loadings ranging from 0.41 to 0.64. The *Process* subscale included 10 questions with factor loading ranging from 0.43 to 0.58. The *Difficult Client Behaviors* subscale included 7 questions with factor loadings ranging from 0.46 to 0.63. The *Cultural Competence* subscale included 4 questions with factor loadings from 0.51 to 0.66, and the *Awareness of Values* subscale included 4 questions with factor loadings of 0.42 to 0.64.

**Reliability**. In terms of reliability or score consistency, the *COSE* total score had a Cronbach's Alpha of .0.93, which indicated excellent internal consistency. Although the subscales had relatively high reliability measurements (see Table 1.1), Larson (2001) suggest using the total *COSE* score to measure counseling self-efficacy. In this study, Cronbach's alpha for the *COSE* pre-test was $\alpha = 0.89$ and for the post-test was $\alpha = 0.94$.

**Construct validity.** Larson and colleague's (1992) Study 1 also presented convergent and discriminant validity of the *COSE*. Convergent validity was supported by comparing *COSE* results to those of the *Tennessee Self-Concept Scale* ($r = .51$ at $p < .001$) and the *State Trait Anxiety Scale* ($r = -.42$, $p < .01$). Discriminant validity was supported by comparing *COSE* results to students' grade point averages (GPAs) ($r = 0.25$) and GRE Verbal scores ($r = .16$).

**Test-retest reliability.** Study 2 by Larson et al. (1992) determined the test-retest reliability of the *COSE Short-Form*, which consisted of 37-items. Participants were 60 counseling students in Pre-practicum courses. Half of the students attended a large Midwestern university and half attended a university in Hawaii (Larson et al., 1922). Participants reported race was 64% Caucasian, 32% Asian, and 4% other.

Test-retest reliability was calculated by having participants take the *COSE Short-Form* twice over a 3-week period. No mock counseling sessions were conducted prior to the re-test. The *COSE Short-Form* total score test-retest reliability was .87. The test-retest reliability scores for the *COSE Short-Form* subscale ranged from .83 to .68 (see Table 1.2). These results indicate that the *COSE Short-Form* is reliable and that a change in score, reflect a change in counseling self-efficacy.

Table 3.2

The 37-item *Counseling Self-Estimate Inventory Short-Form Scoring Properties*

| Subscale | Test-Retest Reliability |
|---|---|
| Micro-skills | .68 |
| Process | .74 |
| Difficulty Client Behaviors | .80 |

| | |
|---|---|
| Cultural Competence | .71 |
| Awareness of Values | .83 |

Larson and colleagues' (1992) Study 3 demonstrate that the counseling self-efficacy was "sensitive to the developmental changes across educational training, years of counseling experience, and semesters of supervision" (p. 106). In this study, the population of interest was expanded from counselors-in-training to professional counselors and counseling psychologists. The sample included three subsets (a) the 213 pre-practicum students from the first study; (b) 52 professional counselors (37 females and 15 males); and (c) 56 counseling psychologists (20 females and 36 males). Ninety three percent of the second and third subsets were Caucasian and 7% were of other ethnic groups. Comparing participant level of training (i.e., bachelors, master's, doctorate) to *COSE* scores indicated a significant main effect education ($F(2, 314) = 4.17$, $p < 0.001$). Participants with bachelor level education scores were significantly lower than those with a master's or doctorate. Comparing participant level of counseling experience (no experience versus 2 to 8 years versus 9 to 39 years) with *COSE* scores yielded a significant main effect ($F(2, 314) = 53.75$, $p < 0.001$). Comparing participants' semesters of supervision (none versus 1 to 3 semesters versus 4 to 6 semesters) with *COSE* scores yielded a main effect ($F(3, 305) -33.46$, $p < 0.01$). The third study's findings support that the *COSE* is sensitive to the developmental changes in educational, counseling experience, and supervision.

**Supervisory Working Alliance Inventory**

The *Supervisory Working Alliance Inventory* (*SWAI*) measures the supervisor/supervisee relationship during clinical supervision. The *SWAI* has two forms: the Supervisor Form and the Trainee Form. The current study used the *SWAI-T* only. The *Supervisory Working Alliance Inventory - Trainee Form* (*SWAI-T*) measures supervisees' perception of the supervisory working alliance (Efstation, Patton & Kardash, 1990).

**Administration and scoring.** The trainee form of the *SWAI-T* is a 19-item inventory with a 7-point Likert scale. The scales range from 1 = Almost Never to 7 = Almost Always. The *SWAI-T* subscales are Rapport and Client Focus. Efstation et al (1990) report the following normative data, the Rapport subscale mean score was 5.85 (*SD* = 0.83), and the Client Focus subscale mean score was 5.44 (*SD* = 0.84). These were determined by summing the individual items for each factor and then diving by the number of items for each factor (Efstation, et al., 1990).

**Background and norms.** The *Supervisory Working Alliance Inventory* was created to measure the supervisor and supervisee's perception of the supervisory working alliance (Efstation, Patton & Kardash, 1990). Efstation et al. (1990) conducted research to create the *SWAI*. The assessment is normed on 185 supervisors and 178 trainees involved with a psychology internship program.

Patton (1992) performed a study to evaluate the use of the *SWAI* compared to the Personal Reactions scale (PRS-R). Sixty-five supervisors and 88 trainees from university staff were sampled as well as 30 supervisors and 30 trainees from a university counseling center (Patton, 1992). The study found through correlations that the *SWAI* was a stronger measure of the supervisory working alliance than the PRS-R due to measuring the relationship on more dimensions.

**Reliability**. The alpha score of the supervisee scale is broken down by subscale. For the Client Focus subscale, the alpha is 0.77 For the Rapport scale, the alpha is 0.90 (Efstation et al., 1990). Patton (1992) found even higher internal consistency reliabilities than the original research by Efstation et al., with the trainee scale of Client Focus at alpha = 0.82, and Rapport at alpha = 0.91 ($n$ = 113). In this study, Cronbach's alpha for the *Swai-T* was $\alpha = 0.99$.

**Validity.** Efstation et al.'s research found a positive correlation ($r$ = 0.50 and 0.52) when compared to the *Supervisor Styles Inventory (SSI)* (1990). This measurement is for the Client Focus scale as compared to Task Oriented scale on the *SSI*. The team found a positive low correlation ($r$ = 0.04 and 0.21) between the *SWAI* and SSI Attractive and Interpersonally Sensitive scales. Furthermore, the *SWAI* scales were found to be significant predictors of counselor-in-training outcomes as measured by the *Self Efficacy Inventory* (*SEI*) (Patton, 1992).

**Demographic Questionnaire**

The current study used an author developed *Demographic Questionnaire* (Appendix B). This instrument consisted of the following items: participants' age, gender, race, program of study (Clinical Counseling or Rehabilitation and Career Counseling in the Addictions and Rehabilitation Department), course (Practicum – master's or doctoral or Counseling Theories), number of group clinical supervision hours received (less than 10, 11-20, 21-30, 31-40, more than 40), number of individual clinical supervision hours received (less than 5, 5-10, 11-15, 16-20,more than 21), number of direct contact hours with clients (0, 1-10, 11-20, 21-30, 31-40, more than 40), previous horse involvement, and a quick health survey to screen for contraindications for working with horses. The *Demographic Questionnaire* was completed along with the pre-test *State-Trait Inventory* and the *Counseling Self-Estimate Inventory.*

## Limitations

The current study has several limitations including instrumentation, design and other threats, maturation and mortality, and social threats.

### Instrumentation

The *State-Trait Anxiety Inventory* (STAI), the *Counseling Self-Estimate Inventory* (*COSE*), and the *Supervisory Working Alliance Inventory* (*SWAI*) are self-report instruments, therefore, social desirability bias is a concern. Social desirability is when participants respond in socially "appropriate" ways rather than how they may be feeling (Pager, 2007).

As previously discussed, the construct validity and the proximity of measuring anxiety, depression, and other mood disorders is a limitation of the *STAI*. Further, when assessing the elderly with and without anxiety disorders, the *STAI* discriminant validity was low (Julian, 2011).

The *SWAI*-T was administered at post-test only, and at this point in the semester, some participants had limited contact with their supervisors. Further, participants in the counseling theories course did not have clinical supervision with a faculty or field-site supervisor, therefore their answers were based on past supervisors.

### Design threats

Another limitation is the use of a purposive sample. Due to expense restrictions, participants were limited to a small purposive sample. However, since the sample was highly representative of the population of interest, the study's results are generalizable to counselors-in-training from CACREP accredited counseling programs.

### Maturation and mortality

Maturation was another threat that could have had impacted the study. Participants were enrolled in a practicum or counseling theories course during the study. There is an expected increase in counseling self-efficacy and decrease in performance anxiety through the natural demands of counseling courses. Having control and treatment group comparisons minimized the maturation threat. To minimize the threat of mortality, the study included a one day 60-minute intervention.

### Social threats

Control group members pre- or post-tests result may have been affected by their learning of the intervention. More specifically, they may have inflated their scores in a rivalry attempt against the treatment group, or they may have felt demoralized and have lower scores due to feeling inferior to the treatment group. The treatment was offered to the control group participants upon completion of the post-tests to minimize this threat.

## Ethical Considerations

Ethical considerations for the current study included participant confidentiality, safety, and impact of intervention. To maintain participant confidentiality data collected from participants was coded without identifying information. Further, the equine assisted learning supervision sessions were held at the farm when other activities are occurring.

Another ethical consideration was participant safety. To ensure participant safety, participants were asked on the *Demographic Questionnaire,* if they have any barriers (e.g., physical disabilities, medical concerns) that may prohibit them from working with horses. Participants were also required to watch a safety video prior to interacting with horses.

Participants received an individual equine assisted learning supervision session, and an equine specialist was present to intervene if assistance was needed.

The final ethical consideration is participants may be deeply impacted by their experience with horses. Proper referrals to counseling services were made should participants request or need the services.

## Chapter Summary

The current study examined the effects of a single-session, equine assisted learning supervision intervention on counselors-in-training performance anxiety, counseling self-efficacy and whether the supervisory working alliance correlated with these factors. The *State-Trait Anxiety Inventory* (*STAI*), the *Counseling Self-Estimate Inventory* (*COSE*) and the *Supervisory Working Alliance Inventory-Trainee Form* (*SWAI-T*) measured participants' pre-post performance anxiety, counseling self-efficacy, and supervisor-supervisee working alliance (post-only).

The target population was master's level or first year doctoral level counselors-in-training. The purposive sample included counselors-in-training from three CACREP accredited counseling programs in eastern North Carolina. The sample was selected from all counselors-in-training enrolled in theories, practicum, and internship courses in the Department of Addictions and Rehabilitation Studies.

This study was a quasi-experimental, pre-post-test design, which included a treatment group (i.e., equine assisted learning (EAL) supervision intervention) and a control group (i.e., field-site course as usual). Data was analyzed using a split-plot MANOVA. A MANOVA allowed this researcher to examine the differences between the treatment and control groups on levels of counseling self-efficacy and performance anxiety. A Pearson product moment

correlation was used to look at correlations between counseling self-efficacy and performance anxiety, the supervisory working alliance and counseling self-efficacy, performance anxiety, and the effectiveness of the intervention. Ethical concerns included, participant confidentiality, safety, and personal and professional growth participants may experience.

# CHAPTER 4

## Introduction to the Chapter

The purpose of this study was to examine the effects of an equine assisted learning supervision intervention on counselors'-in-training performance anxiety, counseling self-efficacy, and the supervisory working alliance. Study assessments were the *State Trait Anxiety Inventory* (*STAI*), the *Counseling Self Estimate Inventory* (*COSE*), and the *Supervisory Working Alliance Trainee Form* (*SWAI-T*). A *Debriefing Questionnaire* was administered to the treatment group following the intervention. This chapter includes sampling procedures, descriptive data results, statistical analysis, and results. The chapter concludes with a summary of the results.

## Sampling Procedures

Participants (students enrolled in three CACREP accredited counseling programs) completed the *STAI* and the pre-tests between August 21, 2017 to September 1, 2017 and completed the *STAI, COSE,* and *SWAI-T* post-tests between October 2, 2016 to October 6, 2017. All instruments were administered via a Qualtrics email distribution list and analyzed with statistical software, SPSS 24. Furthermore, a *Debriefing Questionnaire* was distributed to the treatment group upon completion of the EAL-S intervention. A total of 20 students participated in the study.

## Descriptive Data Results

The sample was comprised of 20 students in a CACREP accredited (clinical mental health, rehabilitation, counselor education and supervision) counseling program at a southeastern university. Participants ages ranged from 20 to 67 years ($M$ = 30.8), and there were 3males and 17 females. Participants self-identified as Caucasian ($n$ = 18; 85.7%) and African American ($n$= 2; 9.5%).

Of the total participants (*N*= 20), 17 were enrolled in the Clinical Counseling program, one was enrolled in Rehabilitation and Career Counseling program and two were enrolled in their first year of the Ph.D. Rehabilitation Counseling and Administration program. All programs were housed within the same college (Allied Health Sciences) and department (Department of Addictions and Rehabilitation Studies). Seven (*n*= 7) participants were enrolled in a Counseling Theories course, and 13 participants were enrolled in a Practicum (master's or doctoral) course.

Participant hours of clinical supervision (individual and group) were assessed at pre- and post-testing. At pre-test, 19 participants reported receiving 0 to 5 hours of individual clinical supervision, and one participant reported receiving 16 to 20 hours of individual supervision. All participants reported receiving 0 to 10 hours of group supervision. Twelve out of 20 participants (57.1%) reported no client contact. Of the remaining eight participants, six (28.6%) reported 1 to 10 hours of face-to-face client time, and two (9.5%) reported 11 to 20 hours of face-to-face client at pre-test.

At post-test, 19 participants reported receiving *0 to 5 hours* of individual clinical supervision, and one participant reported receiving *16 to 20 hours* of individual supervision. All 20 participants reported *receiving 0 to 10 hours* of group supervision. Twelve out of 20 participants (57.1%) reported *no client contact* at the time of pre-test. Of the remaining 8 participants, 6 (28.6%) reported *1 to 10 hours* of face-to-face client time, and 2 (9.5%) reported *11 to 20 hours* of face-to-face client at pre-test.

The treatment group included 10 participants; 1 male (10%) and 9 females (90%) whose ages ranged from 21 to 49 with a mean age of 31. The control group included 10 participants, 2 males (20%) and 8 females (80%) whose ages ranged from 20 to 67 with a mean age of 31.44.

Table 4.1

*Participant Demographics*

| Demographic Variables | Treatment Group ($n$ = 10) | Control Group ($n$ = 10) |
|---|---|---|
| Mean Age (years) | 31 | 31.44 |
| Sex | Males = 1<br>Females = 9 | Males = 2<br>Females = 8 |
| Ethnicity | Caucasian = 9<br>African American = 1 | Caucasian = 8<br>African American = 2 |
| Program | Clinical Counseling = 8<br>Rehab and Career = 1<br>Rehab and Admin = 1 | Clinical Counseling = 9<br>Rehab and Career = 0<br>Rehab and Admin = 1 |
| Course | Theories = 3<br>Practicum = 7 | Theories = 4<br>Practicum = 6 |
| Individual supervision hours | 0 to 5 hours = 9 | 0 to 5 hours = 9 |

| | | |
|---|---|---|
| | 16 to 20 hours = 1 | 16 to 20 hours = 0 |
| Group supervision hours | 0 to 10 hours = 10 | 0 to 10 hours = 10 |
| Face-to-face client hours | None (0) = 6 | None (0) = 5 |
| | 1 to 10 hours = 2 | 1 to 10 hours = 4 |
| | 11 to 20 hours = 1 | 11 to 20 hours = 1 |
| Experience with horses | None = 4 | None = 5 |
| | Somewhat Low = 2 | Somewhat Low = 1 |
| | Low = 1 | Low = 0 |
| | Somewhat high = 3 | Somewhat high = 1 |
| | Extremely high = 0 | Extremely high = 2 |

For previous involvement with horses, nine (42.9%) participants reported *extremely low/zero or close to no involvement* prior to the study. Of the remaining 11, four (19%) participants reported *low/1 year* of previous involvement with horses, 1 (4.8%) reported *somewhat low involvement/2 years),* four (19%) reported *somewhat high/2.5 to 4 years,* and two (9.5%) reported *extremely high/4+ years* of involvement with horses prior to the study.

**Attrition Rate**

Between August 23, 2017 and September 22, 2017, 20 students consented to participate in the current research study. Of the 20 participant who completed the pre-tests, 16 (20%)

completed the post-test for the *COSE*, 19 (5%) completed the post-test for *STAI* and 17 (15%) completed the post-test for the *SWAI-T*.

## Baseline Measures for Treatment Groups

The baseline *STAI-S* (performance anxiety) treatment group mean score ($M$ =2.08, $SD$ = 0.48) was higher than the control group mean score ($M$ =1.84; $SD$ = 0.38). The baseline score for performance anxiety was 0.24 points (out of 4) higher for the treatment group than the control group at pre-test.

The baseline *COSE* treatment group mean score ($M$ =180.67; $SD$ = 22.87) was 1 point (total possible points = 222) higher than the control group ($M$ =179.67; $SD$ = 21.49). There were no baseline scores taken for the *SWAI-T* since participants had little to no interaction with supervisors early in the semester. The means and standard deviations of the baseline scores on the *STAI-S* and *COSE* are compared in Table 4.2.

A split-plot MANOVA was conducted to determine whether the treatment and control groups differed in their *STAI-S* or *COSE* scores. Before conducting the statistical analysis, assumptions of multivariate normality, homogeneity of variance and covariance, and independence of observations were verified through the Kolmogorov–Smirnov test. Further, Chi-square test showed that there was a similar percentage of demographic variables in treatment and control groups. The data distribution among the treatment and control groups met the required specifications for each chosen analysis (Cohen, 1992).

Table 4.2

*Baseline Scores at Pre-Test by Group*

| Instrument | Treatment Group M (SD) | Control Group M (SD) |
|---|---|---|
| *STAI-S* (performance anxiety) | 2.08 (0.48) | 1.84 (0.38) |
| *COSE* (counseling self-efficacy) | 180.67 (22.87) | 179.67 (21.49) |

**Data Analysis Results**

When comparing the treatment versus control group mean *COSE s*cores (counseling self-efficacy), a significant main effect was found (F [1, 13] = 7.98, $p$ = 0.014, partial $\eta^2 = 0.38$). However, when comparing the treatment versus control group mean *STAI-S* (performance anxiety) scores, there was a non-significant difference (F [1, 13] = 1.3, $p$ = *ns*, partial $\eta^2 = 0.09$). Table 4.3 displays a comparison of participants' means group scores.

Table 4.3

*Treatment versus Control Mean Group Scores*

| Instruments | Treatment Pre-test | Control Pre-Test | Treatment Post-test | Control Post-test |
|---|---|---|---|---|
| *STAI-S* | 2.08 | 1.84 | 1.92 | 1.93 |
| *COSE* | 180.67 | 179.67 | 203.67 | 182.00 |
| *SWAI*-T | -------- | -------- | 5.8 | 5.44 |

When a split-plot MANOVA was completed, an interaction between groups' *STAI-S* and *COSE* scores was found (post-test *STAI-S*/post-test *COSE* was $r$ = -0.48; compared to control group $r$ = -0.35). In the following section, the results for the research questions are discussed.

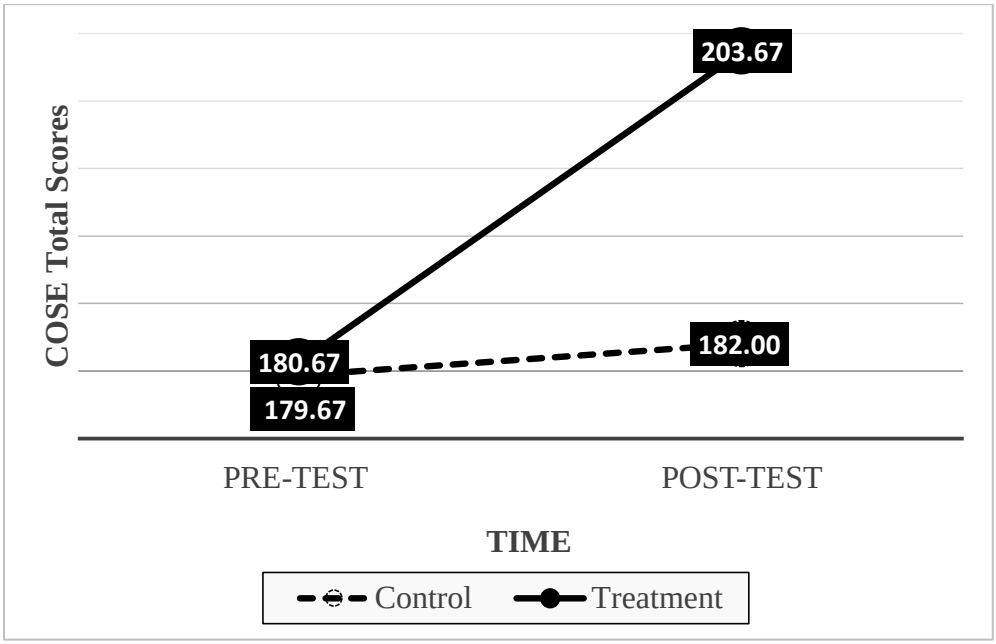
**Research Question 1**

The first research question was: How does a one-hour equine assisted learning supervision intervention influence counselors'-in-training counseling self-efficacy as measured by the *Counseling Self Estimate Inventory*?

A split-plot MANOVA was applied when examining participants' pre- and post-test group mean *COSE* scores and significant differences were found. More specifically, a significant main effect was found for participants in the EAL-S intervention versus class as usual ($F$ [1, 13] = 7.98, $p$ = 0.014, partial $\eta^2$= 0.381).

The treatment group mean score changed on the *COSE* by 23 points, indicating a 23-point increase for participants who received the EAL-S intervention. For the control group, the mean score change was $M$ = 2.33, indication a 2-point increase for participants who receive class as usual. The *COSE* scores of the treatment group as compared to the control group were significantly higher. The partial $\eta^2$ means that 38.1% (large effect size) of the variance in *COSE* scores was accounted for by participation in the EAL-S intervention.

*Figure 3.* Counseling self-efficacy total scores by groups.



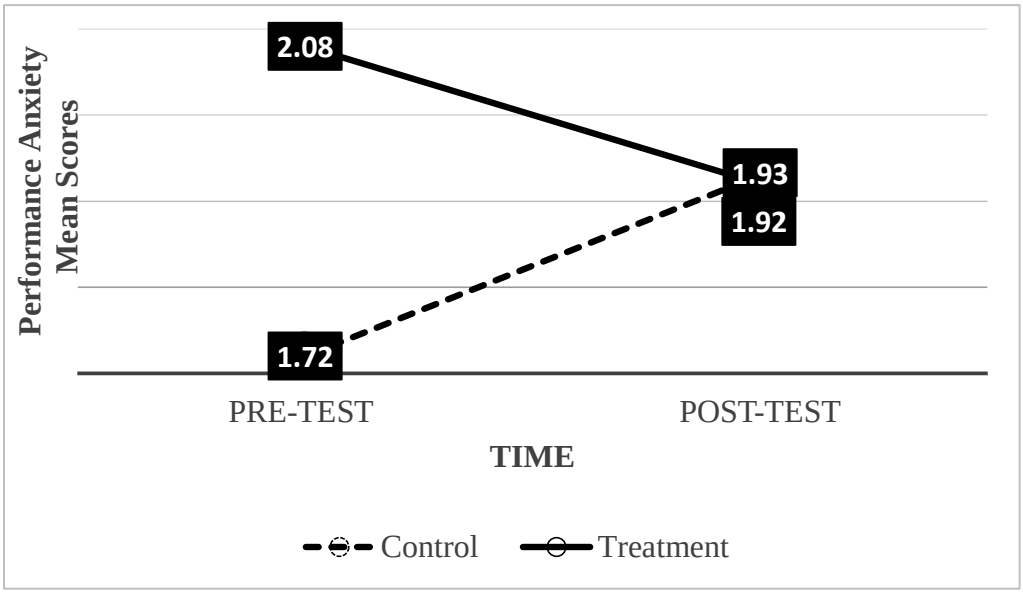

**Research Question 2**

The second research question was: How does a one-hour equine assisted learning supervision intervention influence counselors'-in-training performance anxiety as measured by the *State-Trait Anxiety Inventory* (State scale only)?

A split-plot MANOVA was applied when examining participants' pre- and post-test group mean *STAI-S* scores and a non-significant difference was found ($F[1, 13] = 1.3$, $p = .274$,

partial $\eta^2 = 0.09$). See Figure 4, *STAI-S* Scores by Groups, which illustrates the change over time in the performance anxiety group scores.

*Figure 4.* Performance anxiety mean scores by groups



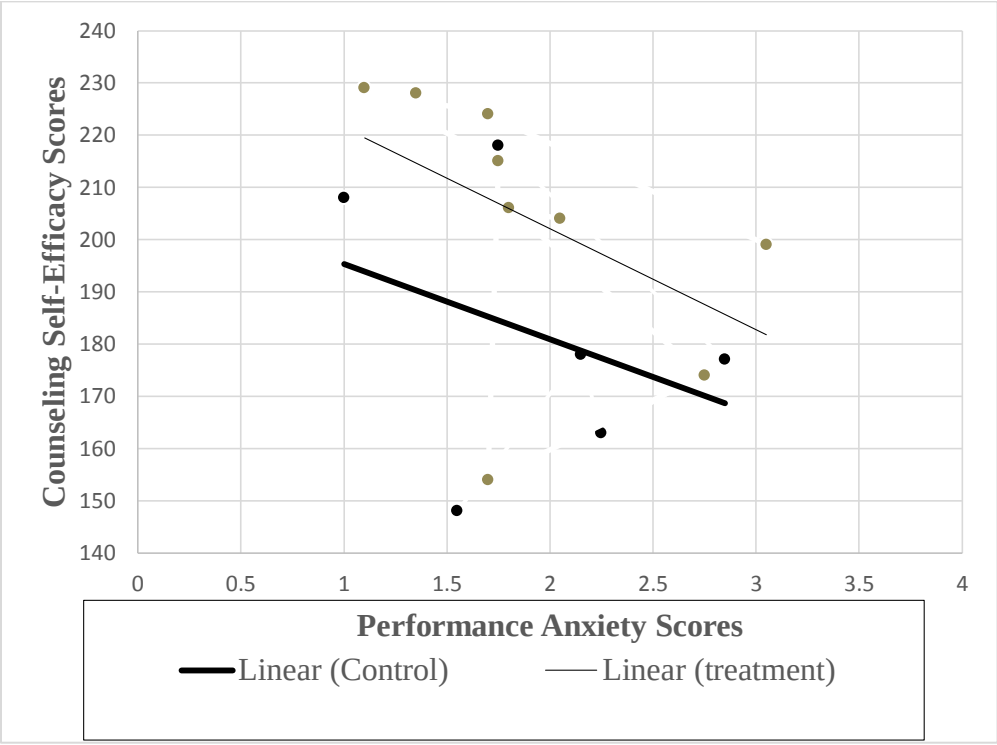

**Research Question 3**

The third research question was: What is the relationship between counselor-in-training counseling self-efficacy, as measured by the *Counseling Self Estimate Inventory*, and counselor-in-training performance anxiety, as measured by the *State-Trait Anxiety Inventory* (State scale only)?

A Pearson product-moment correlation analysis was applied when examining participants' pre- post *STAI-S* scores and pre- post-COSE scores. For post-*STAI-S* and post *COSE* scores, the negative correlation was found ($r = - 0.39$). A negative correlation means as participants post-test performance anxiety increases, their counseling self-efficacy decrease. For participants in the treatment group, this correlation was higher than in the control group. As

shown on Figure 5, the correlations between treatment group participants' post-test *STAI-S* and the post-test *COSE* was $r$ = -0.48 and the control group was $r$ = - 0.35.

*Figure 5.* Post-test counseling self-efficacy and performance anxiety correlations




**Research Question 4**

The fourth research question was: What is the relationship between the quality of the counselor-in-training supervisory working alliance, as measured by the *Supervisory Working Alliance Inventory-Trainee,* and counselor-in-training counseling self-efficacy?

A Pearson product-moment correlation was applied when examining participants' post-test total *COSE* scores by group and *SWAI-T* scores. There was a non-significant correlation between the control group ($r$ = 0.68, $p$ = 0.142) and the treatment group ($r$ = 0.65, $p$ = 0.060) between levels of counseling self-efficacy post-test and the levels of supervisory working alliance.

**Research Question 5**

The fifth research question was: What is the relationship between the quality of the counselor-in-training supervisory working alliance, as measured by the *Supervisory Working Alliance Inventory-Trainee,* and counselor-in-training performance anxiety?

A Pearson product-moment correlation was applied when examining participants' post-test group mean *STAI-S* scores in the control and treatment groups. There was a non-significant correlation in both the control group ($r = 0.15$, p= 0.757) and the treatment group ($r = -0.550$, $p = 0.100$) between post-test performance anxiety and the quality of the supervisory working alliance.

**Research Question 6**

The sixth research question was: What is the relationship between the quality of the counselor-in-training supervisory working alliance, as measured by the *Supervisory Working Alliance Inventory-Trainee,* and the effectiveness of the equine assisted learning supervision intervention?

A Pearson product-moment correlation was applied when examining how the supervisory working alliance (participants' *SWAI-T* scores) correlates with the effectiveness of the EAL-S intervention. Participants' supervisory alliance was based on a median split (scores 7 and higher versus scores 6 and below) on the *SWAI-T*. The change in counseling self-efficacy levels and performance anxiety scores on the pre- and post-test *COSE* and *STAI-S,* respectively, were used to measure the effectiveness of the intervention. There was no correlation between the change in *COSE* scores or the change in *STAI-S* scores and the level of supervisory working alliance on the *SWAI-T* for both the control group ($r = 0.18$, p = 0.73) and the treatment group

($r$ = -0.49, p = 0.26). This indicates there is no difference in the effectiveness of the intervention when correlated with the quality of the supervisory working alliance.

## Summary of Results

This chapter provided a review of the study's sampling procedure, participants' descriptive statistics, and a review of statistical analyses used to answer the research questions. A split-plot MANOVA and a Person Product Moment Correlation were used to examine the effects of a one-hour, equine assisted learning supervision intervention on counselors-in-training performance anxiety, counseling self-efficacy and the influence of the supervisory working alliance on these constructs. Implications of these results are discussed in Chapter 5.

# CHAPTER 5

## Introduction to the Chapter

This chapter provides a review of the study, a discussion of the results, a presentation of the study's limitations, and a discussion of this study's implications, contributions, and recommendations for future research.

## Summary of the Study

Counselors-in-training who experience higher levels of performance anxiety are likely to have lower than average supervisory working alliances (Bernard & Goodyear, 2014). Much of counselors'-in-training performance anxiety is due to the new experience of counseling clients, the evaluative nature of supervision, and the dual role of the supervisor (mentor and evaluator) (Schwing et al., 2011; Skovholt & Ronnestad, 2003). Further, discussions surrounding counselors-in-training areas for growth may cause spikes in performance anxiety, a decrease in counseling self-efficacy, as well as feelings of guilt and shame that may create barriers in the supervisory working alliance (Bernard & Goodyear, 2014).

Addressing counselors'-in-training performance anxiety and its impact on counseling self-efficacy is important to the development of effective counselors. Experiential learning is a suggested means for counselor growth and development (CACREP, 2016). Research has focused on counselors-in-training interpretation of performance anxiety and how performance anxiety is related to counseling self-efficacy. More specifically, a positive trial and error experience for counselors-in-training helps them identify performance anxiety and develop coping skills to overcome said anxiety, which is in keeping with the social cognitive model of counselor development (SCMCT; Larson, 1998).

Supervisory goals of the SCMCT include: (a) identifying barriers to increasing counseling self-efficacy (Kincade, 1998; Larson, 1998) and (b) providing enough support to offset the challenges of being a novice counselor (Kincade, 1998). Sub-goals to increasing counselors-in-training counseling self-efficacy include: (a) creating a manageable level of anxiety that increases supervisees' motivation, (b) developing a positive outlook toward client outcomes, and (c) forming self-evaluation skills (Kincade, 1998). These goals and sub-goals were addressed in this study's equine assisted learning supervision intervention.

The purpose of this study was to examine the effects of a one-hour, equine assisted learning supervision intervention on counselors'-in-training performance anxiety, counseling self-efficacy and the influence of the supervisor-supervisee working alliance on these constructs. Furthermore, this study employed a quasi-experimental design that compared participants' pre- and post-scores on the *Counseling Self-Estimate Inventory* (*COSE*), *State-Trait Anxiety Inventory* (*STAI*; state scale only) and the *Supervisory Working Alliance Inventory (SWAI)* in both the treatment (i.e., equine assisted learning supervision (EAL-S) intervention) and control group (i.e., courses as usual).

This study employed a quasi-experimental design to compare a group of counselors-in-training receiving a one-hour EAL-S intervention with a group of counselors-in-training receiving coursework as usual. This study examined the quality of the supervisory working alliance, as assessed by the trainee on the *SWAI-T*, to establish whether the working alliance impacted counseling self-efficacy, performance anxiety, or the outcome of the EAL-S intervention.

A split-plot MANOVA was applied when examining mean *COSE* scores for participants' pre- and post-counseling self-efficacy and significant differences were found. More specifically,

the *COSE* scores of the treatment group as compared to the control group were significantly higher, with an effect size of 0.381 (partial eta squared). When a split-plot MANOVA was applied to examine participants' pre- and post-test group mean performance anxiety scores, a non-significant difference was found.

A Pearson product-moment correlation analysis was applied when examining participants' pre- and post-performance anxiety scores and pre- and post-counseling self-efficacy scores. The correlations between treatment group participants' post-test *STAI-S* and the post-test *COSE* was $r = -0.475$, slightly higher than the control group ($r = -0.345$). A negative correlation means as participants' post-test *STAI-S* increased, their *COSE* score decreased and vice versa.

A Pearson product-moment correlation analysis was applied when examining the relationship between the supervisory working alliance (participants' *SWAI-T* scores) and the effectiveness of the EAL-S intervention. The influence of the *SWAI-T* scores on the effectiveness of the intervention was non-significant.

The *Debriefing Questionnaire* was administered to participants in the treatment group immediately following the intervention at the intervention site. Although participant responses were not analyzed, examples which support research question findings are provide in Chapter 5

The *Debriefing Questionnaire* questions were:

1. How would you rate your performance anxiety today?

*Extremely Low = 1, Somewhat Low = 2, Low = 3, High = 4, Somewhat High = 5, Extremely High = 6*

(1a) At what point today was your performance anxiety the highest?

(1b) At what point was your performance anxiety the lowest?

(1c) How would you relate your performance anxiety when working with the horse to counseling new or existing clients?

2. At what point was your performance anxiety highest during the semester?

(2a) At what point was your performance anxiety lowest during the semester?

(2b) How would you relate your performance anxiety when working with the horse to performance anxiety during the semester?

3. How would you rate your confidence today?

*Extremely Low = 1, Somewhat Low = 2, Low = 3, High = 4, Somewhat High = 5, Extremely High = 6*

4. How would rate your confidence in working with the horses?

*Extremely Low = 1, Somewhat Low = 2, Low = 3, High = 4, Somewhat High = 5, Extremely High = 6*

5. How would you relate what you experienced today to your role as a new counselor?

6. What did you learn about yourself today as a counselor-in-training?

7. What did you learn about how you handle performance anxiety in new situations?

8. If you could take away one thing from this experience, what would it be?

9. Would you be willing to complete a follow-up survey next semester relating to this study? If so, where should I send the follow-up survey?

## Interpretation of Results

Discussion of the study results and interpretation of the findings is provided in this section. Results are connected to the theoretical approach of the study.

**Research Question 1**

How does a one-hour equine assisted learning supervision intervention influence counselors'-in-training counseling self-efficacy as measured by the *Counseling Self Estimate Inventory*?

A split-plot MANOVA was used to examine the influence of the EAL-S intervention on participants counseling self-efficacy. The findings indicated a significant difference between the treatment and control groups' counseling self-efficacy. When comparing the treatment group mean pre- and post-score on the *COSE,* a 23-point increase was found. The control group mean pre- and post-score increased by 2.33 points. These findings suggest that participants' counseling self-efficacy increased more from the one-hour EAL-S intervention than from classes as usual. The effect size (partial $\eta^2 = 0.381$) indicates 38.1 percent of the variance in *COSE* scores is accounted for by participants' group assignment.

According to the cognitive model of counselor development (SCMCT), practicing the identification and application of coping skills increases counseling self-efficacy (Larson, 1998). Findings of research question one are consistent with participant responses on the *Debriefing Questionnaire*. Participants discussed how they managed their performance anxiety while interacting with the horse and when counseling clients.

Participants uniformly noted anxiety triggers (e.g., novelty of working with a horse, successfully creating a connection with horse or clients, being observed by facilitators/supervisors, failing to get the expected outcome on the first try). All participants identified coping skills (e.g., mindfulness, seeking assistance) used to overcome their performance anxiety. An explanation for this finding is that the experience of overcoming

performance anxiety, forming a positive connection with the horse, and identifying how to overcome the anxiety had a positive impact on participants' counseling self-efficacy.

In keeping with the current findings, past research supports the effectiveness of equine assisted activities and therapies (EAAT) (Anestis, Anestis, Zawilinksi, Hopkins & Lilienfeld, 2014; Klontz, et a.., 2007; Nimer & Lundahl, 2007; Selby et al., 2013). However, most of this research focused on clinical populations. This researcher found two studies which focused on a non-clinical supervision population (Dyk et al., 2013; Stewart, et al., 2013).

In Dyk et al.'s (2013) study, expert nurses who worked with novice nurses attended a half day equine guided leadership workshop reported gains in emotional intelligence, which included the sub-competencies of self-awareness, self-management, social awareness, and relationship management. Dyr et al. (2013) found a significant difference between the treatment group and the control group in all dimensions, most notably relationship management and social competency. These areas (relationship management and social competency) are like the areas that emerged in the current study content analysis, as participants reported connecting with the horse help them in connecting with clients.

Stewart et al.'s (2013) study added a dog to the supervision sessions of counselors-in-training. Participants reported an increased comfort level in supervision, and although counselor self-efficacy was not objectively measured, participants reported an increase in counseling self-efficacy. The intent of adding the dog to supervision sessions with counselors-in-training was to decrease anxiety and increase the supervisory working alliance. As previously discussed, according to the SCMCT, one task in increasing counseling self-efficacy is to provide moderately anxiety provoking situations that counselors-in-training can work through to increase self-awareness and obtain a mastery experience. Stewart et al.'s (2013) findings as well as the

current study's finding suggest that an EAL-S intervention provides a mastery experience for counselors-in-training.

The current study's theoretical underpinning, social cognitive theory and the SCMCT provide insight into the effectiveness of the EAL-S intervention. According to the social cognitive model, successful task performance positively influences counselors-in-training belief their ability to accomplish tasks successfully (self-efficacy). Although some of the participants had to change their approaches, all treatment group participants had successful experiences with the horse.

As discussed in chapter two, the SCMCT suggests four ways to increasing counseling self-efficacy: mastery experiences, modeling, social persuasion, and affective arousal. The mastery experience for participants during the intervention was overcoming their performance anxiety, which is inherent in new role taking tasks that are being observed by others (i.e., horse facilitator and researcher) and being successful during the intervention. Most participants defined success as connecting with the horse and to walking the horse back to the barn across grass at the end of the intervention. To increase the likelihood of participant success, the horse and the facilitator provided encouraging, constructive feedback that was doable and specific (i.e., social persuasion).

During the grooming process, the horse behavior provided constructive feedback to participants. For example, if participants were anxious but tried to approach the horse with confidence, the horse would become tense and lean away. However, when participants verbalized their anxiety and took a deep breath, the horse would lean into participants. Horses' behavior modeled how to come back from anxiety to achieve connection, Affective processes regulate emotional states and reactions such as anxiety. Participants had to recognize their trigger

for increased performance anxiety and develop a coping skill to decrease their anxiety. Participants identified a number of coping strategies on the *Debriefing Questionnaire*, such as being mindful, staying in the moment, asking for assistance and change one's self-talk. The fact that the EAL-S included all recommended growth constructs in counselor self-efficacy, may have increased the effectiveness of the intervention. Overall, findings support incorporating a one-hour EAL-S in theories-based or skills-based counseling courses.

**Research Question 2**

How does a one-hour equine assisted learning supervision intervention influence counselors'-in-training performance anxiety as measured by the *State-Trait Anxiety Inventory*?

A split-plot MANOVA was applied when examining participants' pre- and post-test group mean *STAI-S* scores and a non-significant difference was found. This finding suggests that performance anxiety is not decreased through a one hour EAL-S intervention. This finding may be due to the small study sample. The effect size was moderate in size (0.09), which suggests results were trending towards a reduction in the treatment group's performance anxiety and a slight increase in the control group's performance anxiety. With more participants, significance may have been found.

Another possibility is the participants increase in counseling self-efficacy enables them to cope better with their performance anxiety. More specifically, counselors-in-training with low counseling self-efficacy interpret performance anxiety as a debilitating obstacle. Whereas, counselors-in-training with higher counseling self-efficacy interpret the same level of performance anxiety as motivation to try harder, to attempt new actions, or seek feedback/advice (Larson & Daniels, 1998).

Furthermore, during the EAL-S intervention, participants had to take a trial-and-error approach to forming a connection with the horse and found success in doing so. Some attribute this to their adaptability, some to being mindful and staying present, and others to accepting help from supervisors. Participants' self-described coping skills addressed the main barriers to supervision found in the literature (anxiety due to the dual nature of supervision (mentor/evaluator), difficulty staying in the moment, and deciding how to react to situations that come up in the counseling session (Schwing et al., 2011; Skovholt & Ronnestad, 2003).

According to the SCMCT, supervisors can increase counseling self-efficacy in counselors-in-training by introducing and supporting them through performance anxiety provoking situations (Kincade, 1998). The EAL-S intervention is in keeping with the challenge and support paradigm. Arriving at the farm, participants were anxious before and initially meeting the horse but with the support of the facilitator, all participants successfully completed the intervention. The level of facilitator/horse support and participants' increase in counseling self-efficacy led to positive participant outcomes despite the lack of reduction in performance anxiety.

Marmarosh and colleagues (2013) study with counselors-in-training found that those who were more anxious rated themselves "less self-aware, more dependent, and less motivated than the average student" (p. 184) Another goal of the SCMCT is to develop self-evaluation skills in counselors-in-training. Since the horse's feedback is nonverbal, participants had to interpret out loud what the horse was telling them, leading to more self-awareness and evaluation. On the *Debriefing Questionnaire*, participants reflected on their ability to form a connection with the horse without feeling "shameful" or "guilty" about mistakes since bonding with a horse was a novel experience and not something they "felt like [they} should be able to

do". Participants then discussed how with experience and support they got increasingly comfortable with the horse and with counseling clients.

Findings suggest that incorporating a one-hour interaction with a horse as a part of counseling supervision may not reduce their performance anxiety but provides the opportunity to develop coping skills, accept support and gain counseling self-efficacy.

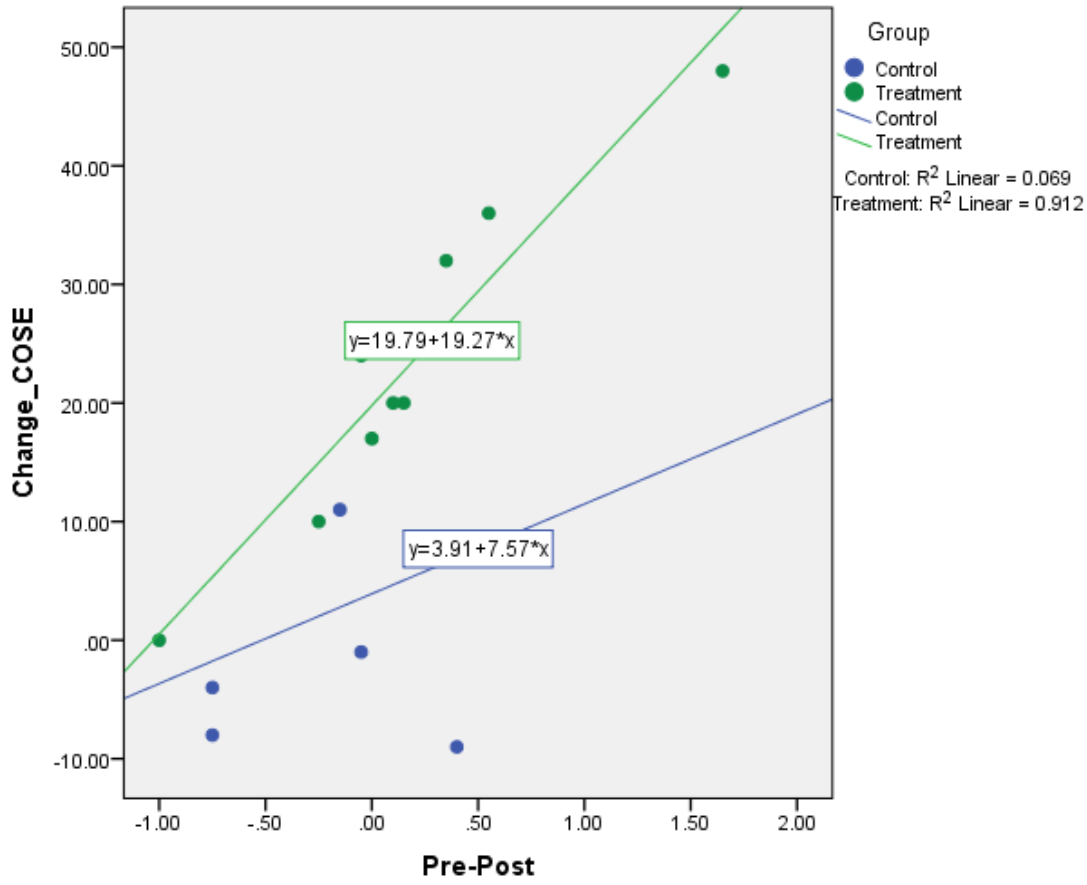
**Research Question 3**

The third research question was: What is the relationship between counselor-in-training counseling self-efficacy, as measured by the *Counseling Self Estimate Inventory*, and counselor-in-training performance anxiety, as measured by the *State-Trait Anxiety Inventory* (State scale only)?

A Pearson product-moment correlation analysis was applied when examining participants' pre- post *STAI-S* scores and pre- post-*COSE* scores. For post-*STAI-S* and post *COSE*, the negative correlation was found ($r$ = - 0.39). For participants in the treatment group, this correlation was higher than in the control group. As shown on Figure 5, the correlations between treatment group participants' post-test *STAI-S* and the post-test *COSE* was $r$ = -0.475 and the control group was $r$ = -0.345.

When a correlation was run to examine the relationship between the change in counseling self-efficacy and the change in performance anxiety over the course of the study (pre-test minus post-test scores), there were differences found between the treatment group and the control group. For the control group, the changes was almost non-existant ($r$ = 0.26, $p$ = 0.62). However, the treatment group scores were almost linear with an $r$ = 0.955 correlation (p = 0.0004).

*Figure 6.* Difference between the change in counseling self-efficacy and performance anxiety by group.




Research supports a negative correlation between the counseling self-efficacy and performance anxiety (Larson, 1998). Furthermore, most participants reported on the *Debriefing Questionnaire* that as their comfort level with the horse increased, their anxiety decreased which led to them forming a connection while leading and grooming the horse. Other participants commented on how their ability to control their anxiety positively affected the horse's self-efficacy and decreased the horse's anxiety. Participants linked this circular interaction to working with clients as well. One participant wrote, *"The experience helped me realize the importance of knowing/observing/understanding body language and remaining relaxed/calm so*

*the client is comfortable."* This finding indicates that as the level of counseling self-efficacy increases, performance anxiety decreases.

**Research Question 4**

What is the relationship between the quality of the counselor-in-training supervisory working alliance, as measured by the *Supervisory Working Alliance Inventory-Trainee*, and counselor-in-training counseling self-efficacy?

A Pearson product-moment correlation analysis was applied when examining participants' pre-test group mean *COSE* (total) scores and a non-significant difference was found. However, most of the scores on the *SWAI*-T were indicative of a positive supervisory relationship ($M$ = 5.65 out of 7, $SD$ =1.4). The lack of significance may be due to the lack of variance in participants' scores and due to the small sample. That is, a larger sample with more diverse responses to the supervisory working alliance may have had an impact on participants' counseling self-efficacy. Additionally, some participants had just begun supervision, while others were not receiving supervision (i.e., students in the counseling theories course).

A significant correlation was found between *SWAI*-T scores and the pre- and post-*COSE* scores. The *SWAI*-T scores and the pre-test *COSE* scores, the correlation was $r = 0.52$ with $p = 0.039$, and for post-test *COSE* scores, the correlation was $r = 0.664$ with $p = 0.007$. One interpretation of this result is that participants who reported higher counseling self-efficacy reported a more positive supervisory working alliance. The SCMCT literature suggests that the supervisory working alliance is stronger with counselors-in-training with higher counseling self-efficacy, so this finding would be supported by the literature (Larson, 1992).

The SCMCT main tenets include: (a) positive supervisory working alliance creates a safe place for counselors-in-training to develop counseling self-efficacy and (b) the level of

counseling self-efficacy impacts counselors-in-training in-session responses, risk taking behaviors, and persistence despite failing (Larson, 1992). Participant responses on the *Debriefing Questionnaire* support the idea that the supervisory relationship is integral to participants' growth in counseling self-efficacy. Participants wrote that learning to trust the facilitator's suggestions and incorporate them into building a connection with the horse made them feel more confident in asking for help from their supervisors and in trying new things. One called it "*changing the mindset"* and another wrote to "*be confident in what I am taught."* These writings suggest the experience with the horse helped treatment group participants to be more comfortable asking for assistance and trying suggestions from their supervisors.

**Research Question 5**

What is the relationship between the quality of the counselor-in-training supervisory working alliance, as measured by the *Supervisory Working Alliance Inventory-Trainee*, and counselor-in-training performance anxiety?

A Pearson product-moment correlation analysis was applied when examining participants' pre- and post-test group mean *STAI-S* scores and a non-significant difference was found. For participants in the current study, experiencing performance anxiety does not impede having a positive supervisory working alliance.

One possible explanation for this may be found in participants' responses on the *Debriefing Questionnaire.* Participants reported having a facilitator/supervisor present increased their performance anxiety. However, the suggestions and feedback the facilitator/supervisor provided were helpful and led to success during the intervention. Therefore, the level of performance anxiety did not change as much for participants with the client, but they learned to

talk about this anxiety with their supervisor to provide alternate ways of dealing with it in counseling sessions.

### Research Question 6

What is the relationship between the quality of the counselor-in-training supervisory working alliance, as measured by the *Supervisory Working Alliance Inventory-Trainee,* and the effectiveness of the equine assisted learning supervision intervention?

A Pearson product-moment correlation was applied when examining how the supervisory working alliance (participants' *SWAI-T* scores) correlates with the effectiveness of the EAL-S intervention. The influence of the *SWAI-T* scores on the effectiveness of the intervention was non-significant. This finding suggests that participants with strong and weak supervisory working alliances benefited from the intervention. Since the treatment group's counseling self-efficacy is growing at a greater rate, one might suggest that the treatment positively impacted the supervisory working alliance rather than the supervisory working alliance impacting the intervention outcomes. Counselors-in-training with high counseling self-efficacy tend to develop stronger supervisory working alliances (Larson, 1998). This suggest that EAL-S interventions increase counseling self-efficacy and have a positive impact on the supervisory working alliance.

## Limitations

The current study has several limitations including instrumentation, design and other threats, maturation and mortality, and social threats.

### Instrumentation

The *State-Trait Anxiety Inventory* (*STAI*), the *Counseling Self-Estimate Inventory* (*COSE*), and the *Supervisory Working Alliance Inventory-Trainee* (*SWAI-T*) are self-report instruments, therefore, social desirability bias is a concern. Social desirability is when

participants respond in socially "appropriate" ways rather than how they may be feeling (Pager, 2007).

As previously discussed, the construct validity and the proximity of measuring anxiety, depression, and other mood disorders is a limitation of the *STAI*. Further, when assessing the elderly with and without anxiety disorders, the *STAI* discriminant validity was low (Julian, 2011).

**Design threats**

Another limitation is the use of a purposive sample. Due to expense restrictions, participants were limited to a small purposive sample. However, since the sample was highly representative of the population of interest, the study's results are generalizable to counselors-in-training from CACREP accredited counseling programs. The purpose of this study was to be a pilot study designed to be replicated with larger samples in the future over a longer time frame.

The equine specialist (human facilitator) of the EAL-S intervention in this study was an experienced horse person and former substance-abuse counselor which may have influenced the study's findings. Having a novice horse person or a facilitator with no mental health background may influence the effectiveness of the intervention.

**Maturation and mortality**

Maturation was another threat that could have had impacted the study. Participants were enrolled in a practicum or counseling theories courses during the study. Also, two of the participants were in their first year of the doctoral program, one in the control group and one in the treatment group. They may be at a developmentally different stage as doctoral students and this may have impacted their responses to the assessments and treatment.

There is an expected increase in counseling self-efficacy and decrease in performance anxiety through the natural demands of counseling courses. Having control and treatment group comparisons minimized the maturation threat. To minimize the threat of mortality, the study included a one day 60-minute intervention.

### Social threats

Control group members pre- or post-tests result may have been affected by their learning of the intervention. More specifically, they may have inflated their scores in a rivalry attempt against the treatment group, or they may have felt demoralized and have lower scores due to feeling inferior to the treatment group. This was controlled for by offering the treatment to control group members upon completion of post-tests.

## Implications

The purpose of this study was to examine the effects of an equine assisted learning supervision intervention on counselors'-in-training performance anxiety, counseling self-efficacy, and the supervisory working alliance. Results showed that the EAL-S intervention was useful in increasing counseling self-efficacy in counselors-in-training regardless of the quality of their supervisory working alliance. No change in counselors-in-training performance anxiety was found. However, counselors-in-training self-reported feeling more equipped to handle their anxiety when interacting with the horse and clients. The findings support the addition of an EAL-S intervention counselors-in-training.

### Implications for Counselor Educators and Supervisors

**Performance anxiety.** During the EAL-S intervention, participants experienced performance anxiety in a novel setting, and with the facilitator's support and guidance, participants were successful. The *Debriefing Questionnaire* allowed participants to relate this

experience to counseling with clients and to identify what helped them cope with their performance anxiety. Although a significant reduction in participants' performance anxiety was not found, the interaction with the horses demonstrated the impact of their performance anxiety to participants. Additionally, participants sought to maintain a connection with the horse which led to the use of coping skills to decrease performance anxiety.

The anxiety surrounding the horse activity, when identified, was worked through and did not impact the connection between participant and horse. For example, a participant who stated they were nervous about interacting with a horse did not elicit a nervous reaction from the horse. Participant who were nervous and chose not to voice their anxiety had a harder time connecting with the horse. Once participants acknowledged their anxiety, the connection with the horse improved (e.g., horse immediately took a deep breath and leaned into participants). Many participants noted this experience saying that the horse's display of trust and relaxation decreased their anxiety more than their presence comforted the horse.

Participants' anxiety did not diminish the connection with the horse, but loss of focus (i.e., thinking about things other than the horse) did diminish the connection. On the *Debriefing Questionnaire*, participants related this loss of focus to counseling clients. One participant wrote, *"I learned I can overcome my performance anxiety and try to adjust/adapt to the experience in a way that is successful for myself and the client I'm working with*". This understanding may not have occurred during supervision in an office setting.

Within the one hour duration of the intervention, participant's anxiety visibly decreased and their comfort level increased as observed by facilitator. The information gathered through the *Debriefing Questionnaire* supported these observations. With such a noticeable change in one session, the opportunity to add a longer-term (2 session or more) intervention where

counselors-in-training continuing to build a relationship the horse may have a great impact. Due to the time constraints of practicum (eight hours a week at field-sites), students may not experience long-term therapeutic relationship building. Therefore, a longer-term EAL-S intervention, which exposes counselors-in-training to mastery experiences, may better prepared them for internship.

**Counseling Self-Efficacy**

Counseling self-efficacy of the treatment group increased 10 times more than the control group. Furthermore, the effect size was large despite the small sample and the belief intervention (one hour). Given the magnitude of the results, an EAL-S intervention is a time-efficient way to produce more effective counselors-in-training.

The intervention became a mastery experience for participants. When leading the horse and talking about anxieties surrounding clients and counseling, there was an immediate disconnect between the horse and the participant. The participants felt that this was due to taking their attention off the present moment and "*getting in their head*". The idea of staying present and connecting with clients instead of worrying about what to say or do was a recurring theme in the answers to the *Debriefing Questionnaire*. Having a mastery experience with the horse and keeping a strong connection despite brief moments of disconnect improved participants' belief that can quiet themselves and stay present with further clients.

The EAL-S intervention also provided an opportunity for all four recommended growth constructs in counselor self-efficacy (i.e., mastery experiences, modeling, social persuasion, and affective arousal), which may explain the increase in the treatment group's self-efficacy (Bandura, 1989; Larson, 1998). There were times during the intervention where the feedback from the horse frustrated participants, such the horse refusing to walk but participants did not

blame the horse as they might a client. Instead, they found other ways to communicate their intent to the horse and re-established a connection. Participants did not label the horse as "resistant" or "stubborn" and participants described a detailed self-evaluation in the *Debriefing Questionnaire* of what they did to reconnect with the horse. The EAL-S intervention provided an opportunity for participants to receive feedback in a less threatening, more accepting way, and relate this to their growth as a counselor. Whereas, corrective feedback in tradition supervision settings can lead to a reduction in counselor self-efficacy and the supervisory working alliance (Bernard & Goodyear, 2014; Larson, 1998)

**Implications for Equine Assisted Activities and Therapies**

**Design**. Activities included in the EAL-S intervention were chosen to form a connection with the horse and to maintain safety for participants with little to no horse experience. For example, observing the herd may have been beneficial to participants (calming effect), however, the round penning activity was chosen due to the initial anxiety it produces in participants. The round penning activity gave participants an opportunity to experience, identify, and cope with performance anxiety.

The horseman's handshake, grooming, and leading activities contribute to forming a bond with the horse in a calm, slow manner that allow the innate need of the horse for connectedness to blend with the person's own innate need to connect. When an EAL-S intervention is included in traditional office-based supervision, there are a multitude of opportunities for the participants and horses to form a connection through trial and error, repetition of what works, and time to be mindful and pay attention to the bond.

An interesting discovery from this study is that the size of the horse did not seem to contribute to participants' anxiety. Some participants interacted with a large horse, while others

worked with a miniature horse. Participants expressed nervousness regardless of which horse size they were assigned. There is something innately novel about interacting with horses as well as the natural characteristics of horses that lend themselves to animal assessed interventions that is not lost when using the miniature horses. Although small in stature, they share the same innate qualities as their larger counterparts. In this study, it was the horse's characteristics that instilled a reaction in humans rather than their size.

## Recommendations for Future Research

One recommendation for future research is replication of the study with a larger sample. Small sample sizes are an issue in EAAT research. Future research may improve participant recruitment by offering incentive to participates (e.g., gas card for the cost of traveling to the intervention site). Additionally, when the current data was weighted by 3 (3 times the scores of each participant) significance was found in the *COSE* and the *STAI-S* scores by group (*COSE*: $F[1, 43] = 4.31$, $p = 0.04$, partial $\eta 2 = 0.09$; *STAI-S:* $F[1, 43] = 26.412$, $p < 0.00$, partial $\eta 2 = 0.38$) which supports the need for a larger sample.

Another recommendation is to increase the time between the administration of the pre- and the post-tests for the *COSE, STAI-S,* and *SWAI*-T. Tracking counselors-in-training progress from pre-practicum, practicum, and internship may maximize the effectiveness of the EAL-S intervention. More time between pre- and post-tests would allow for the collection of pre-test *SWAI-S*. Furthermore, the follow-up tests could be administered at the intervention site to minimize extraneous variables accounting for the change in the constructs measured.

The final suggestion is to increase the use qualitative methods. The content analysis of the *Debriefing Questionnaire* yielded rich data that complemented the quantitative results of this

study. A mixed-methods format with more qualitative data would add to the understanding of counselors-in-training EAL-S experience.

## Conclusion

Equine assisted learning as an intervention for the supervision of counselors-in-training is a new approach to incorporating animals into the therapy field. The current study presented EAL-S as an intervention to increase counselor-in-training counseling self-efficacy and decrease performance anxiety. The intervention was found to increase counseling self-efficacy and to help participants cope more effectively with performance anxiety. Given these findings, the EAL-S intervention could be expanded upon and incorporated into CACREP masters' counseling programs to produce more effective counselors.

This chapter began with a summary of the current study, followed by an interpretation of the qualitative and quantitative findings for each research question. The limitations of the study and the study implications for counselor education and supervision, equine assisted activities and therapies and future research were discussed.

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## APPENDIX A – CONSENT TO PARTICIPATE IN RESEARCH

Consent to Participate in Research

Dear Participant,

I am a doctoral candidate at East Carolina University (ECU) in the Department of Addictions and Rehabilitation Studies. I am conducting research under the direction of Dr. Shari M. Sias, as a requirement of my doctoral degree in Rehabilitation Counseling Administration. I am asking you to take part in my research entitled "The Effects of an Equine Assisted Learning Supervision Intervention on Counselors-in-Training Self-Efficacy and Performance Anxiety".

The purpose of this research is to explore the efficacy of equine assisted learning supervision activities on master's counseling students' performance anxiety, counseling self-efficacy, and supervisor-supervisee working alliance. By doing this research, I hope to compare equine assisted learning supervision with supervision as usual in skills-based classes in master's CACREP counseling programs. Your participation is completely voluntary.

You are being invited to take part in this research because you are a counselor-in-training in a CACREP accredited counseling program at East Carolina University in Greenville, North Carolina. The amount of time will take you to complete this survey is 20 minutes.

If you agree to participate, you will complete a Demographic Questionnaire, the Counselor Self-Estimate Inventory (COSE), the State Trait Anxiety Inventory (STAI), the Supervisory Working Alliance Inventory (SWAI), and a Debriefing Questionnaire regarding your experience as a research participant. You may discontinue participating at any point in the study.

This research will involve two groups. The first group will take the above assessments twice in a classroom setting, and another group will take the assessments once in the classroom and once after participation in a brief, one hour individual equine (horse) assisted intervention at Rocking

Horse Ranch. The ranch is located on State Highway 43 in Greenville (about seven minutes from the Health Science Campus). Students are randomly assigned to the classroom and the Rocking Horse Ranch group. **There is no riding involved with the horses at the ranch, just a brief interaction with the horse on the ground.** This research is overseen by the ECU Institutional Review Board. Therefore, Institutional Review Board members and their staff may need to review my research data. However, the information you provide will not be linked to you. Therefore, your responses cannot be traced back to you by anyone, including me.

If you have questions about your rights when taking part in this research, please call Dr. Shari M. Sias at (252) 744-6304; siass@ecu.edu or the ECU Office of Research Integrity & Compliance (ORIC) at phone number 252-744-2914 (8:00 am-5:00 pm). If you would like to report a complaint or concern about this research study, call the Director of ORIC, at 252-744-1971.

You do not have to take part in this research, and you can stop at any time. If you decide you are willing to take part in this study, please continue on with the survey below. Thank you for taking the time to participate in my research.

Sincerely,

Cheryl Meola

Principal Investigator

## APPENDIX B - DEMOGRAPHIC QUESTIONNAIRE

1. What is your age in years? _____

2. What is your race? (Please circle)

- White/Causation
- Hispanic/Latino
- Black/African American
- Native American/American Indian
- Asian/Pacific Islander
- Other

3. Gender: (Please circle)

- Female
- Male
- Other

4. Education program: (Please circle)

- Clinical Counseling (Addictions and Rehabilitation)
- Clinical Mental Health Counseling (Counselor Education)
- Rehabilitation and Career Counseling (Addictions and Rehabilitation)
- School Counseling (Counselor Education)
- Student Affairs and College Counseling (Counselor Education)

5. Course currently enrolled: (Please circle)

- Pre-practicum
- Practicum

- Internship

6. Number of hours of **individual** clinical supervision **this** semester: (Please circle)

- 0 to 5 hours
- 6 to 10 hours
- 11 to 15 hours
- 16 to 20 hours
- Over 20 hours

7. Number of hours of **group** clinical supervision **this** semester: (Please circle)

- 0 to 10 hours
- 11 to 20 hours
- 21 to 30 hours
- 31 to 40 hours
- Over 40 hours

8. Number of client face-to-face hours **this** semester: (Please circle)

- None (0)
- 1 to 10 hours
- 11 to 20 hours
- 21 to 30 hours
- 31 to 40 hours
- Over 40 hours

9. Horse history/involvement: (Please circle)

Extremely Low (0 or close to), Somewhat Low (1 year), Low (2 years), Unsure, Somewhat High (2.5 to 4 years), or Extremely High (4+ years).

10. Have you ever had a negative experience with horses that you feel may impact your future interactions with horses?

Yes

No

## APPENDIX C - PARTICIPANT REGISTRATION AND RELEASE

ROCKING HORSE RANCH THERAPEUTIC RIDING PROGRAM, INC.

1721 BLUE BANKS FARM ROAD

GREENVILLE, NC 27834

PARTICIPANT REGISTRATION AND RELEASE FORM

Name: _____

Date of Birth: _____ Age: _____

Street Address: _____

City: _____State: _____Zip: _____

Home Telephone: _____

Work Telephone: _____

School/Institution presently attending: _____

Parents/Guardian: _____

Address: _____

Telephone: _____ Email: _____

Employer of Responsible Adult: _____

In case of emergency:

Contact: _____

Telephone: _____

Contact: _____

Telephone: _____

Health History:

Please describe your current health status, particularly regarding the physical/emotional demands of participating in an equine assisted activities program. Address fitness, cardiac, respiratory, and orthopedic issues you may have along with any recent hospitalizations/surgical procedures.

_____

_____

Allergies: _____

_____

Medications: _____

_____

Can you walk for 60 minutes and jog for short distances? (Please circle) Yes No

**WARNING**

**Under North Carolina law, an equine activity sponsor or equine professional is not liable for an injury to or the death of a participant in equine activities resulting exclusively from**

**the inherent risks of equine activities. Chapter 99E of the North Carolina General Statues.**

## Liability Release

_____ (participant's name) would like to participate in the Rocking Horse Ranch Therapeutic Riding Program, Inc. ("Rocking Horse Ranch"). I have read the posted warning notice (Chapter 99E-3 of North Carolina General Statutes (also included below) and I acknowledge and assume the risks and potential for risks of equine assisted activities / therapy; these activities may include therapeutic riding, therapeutic interactive vaulting, hippotherapy, equine facilitated mental health/learning activities, grooming and ground school activities. However, I feel that the possible benefits to myself/my son/my daughter/my ward are greater than the risk assumed. I hereby, intending to be legally bound, for myself, my heirs and assigns, executors or administrators, waive and release forever all claims for damages against Rocking Horse Ranch Therapeutic Riding Program, its Board of Directors, Instructors, Therapists, Aides, Volunteers and/or Employees, and/or the owners of any horses used by the program, for any and all injuries and/or losses I/my son/daughter/my ward may sustain while participating in Rocking Horse Ranch Therapeutic Riding Program.

Signature: _____

(Participant, Parent, or Guardian) (Date)

**Photo Release (optional)**

I hereby consent to and authorize the use and reproduction by Rocking Horse Ranch Therapeutic

Riding Program of any and all photographs and any other audiovisual materials checked off below that were taken of me/my son/daughter/my ward for promotional printed material, educational activities or for any other use for the benefit of the program.

____photo ____video ____RHR website ____RHR Facebook ____Student educational project

Date: _____Signature:_____

## APPENDIX D – PARTICIPANT SAFETY SCRIPT

1. Please walk around horses. Refrain from skipping, running, leaping and jogging unless otherwise directed by barn staff.

2. Please use a quiet voice around horses unless otherwise directed by barn staff.

3. When approaching a horse, never approach directly from the rear. They cannot see you coming and may be startled and act out.

4. Always keep the extra lead rope in your outer hand and never wrap it around your hands, arms, or body.

5. Be aware of your feet at all times and keep them away from the horse's hoof.

6. Listen to the horse staff's instructions at all times- even if you are familiar with horses, you are not familiar with these horses and what they are used to.

7. Please walk around horses. Refrain from skipping, running, leaping and jogging unless otherwise directed by barn staff.

8. Please use a quiet voice around horses unless otherwise directed by barn staff.

9. When approaching a horse, never approach directly from the rear. They cannot see you coming and may be startled and act out.

10. Always keep the extra lead rope in your outer hand and never wrap it around your hands, arms, or body.

11. Be aware of your feet at all times and keep them away from the horse's hoof.

12. Listen to the horse staff's instructions at all times- even if you are familiar with horses, you are not familiar with these horses and what they are used to.

I pledge to keep follow these rules and to myself and others around me safe to the best of my ability.

Signed _____

## APPENDIX E – EQUINE ASSISTED LEARNING SUPERVISION EXERCISES SCRIPT

### Exercise 1: Horseman's Handshake

**Description of activity:** Participants will be introduced to their horse and be given a brief background of the horse's likes, dislikes, and personality. The facilitator will demonstrate how to greet the horse with a horseman's handshake (i.e., fingers closed and down, arm extended, letting the horse make first physical contact). Participants will be shown how to enter the horse's space respectfully. Five minutes will be taken to get to know and become comfortable with the horse.

**Therapeutic Goal**: To experience a connection with the horse and build confidence in participants' understanding of nonverbal cues, spatial cues, boundaries, and self-awareness.

### Exercise 2: Grooming for Connection

**Description of activity:** Participants will learn to groom the horse quietly and with confidence while reading the horse's nonverbal cues. The facilitator will guide participants through the use of the grooming tools while asking for participants' interpretation of the horses' response throughout the process.

**Therapeutic Goal**: To increase participants' feelings of connection with horses, building confidence in participants' understanding nonverbal body language and to discuss relationship building.

### Exercise 3: Mindful Leading

**Description of activity:** Participants will be introduced to how to lead the horse. The facilitator will demonstrate proper leading body language and encourage participants to lead their horse in the arena. Participants will be asked to think of something that tends to distract them during

counseling and to talk about it out loud to the horse while leading. Participants are then asked to multiply by 3 in their head while leading the horse. Participant are then instructed to lead the horse thinking only of the horses', experiencing through the senses, and being aware of their body. This will last 15 minutes.

**Therapeutic Goal**: To experience the importance of mindfulness when leading the horse. To give an opportunity for a successful experience with the horse, establish boundaries, and discuss presentation, presence, and relationship building. Tune in to nonverbal body language, both their own and the horse.

**Exercise 4: Processing**

**Description of activity:** This will take place in an office at the farm. Participants will be assessed for safety and recommendations will be made if needed for further self-exploration. Participants will complete post-tests and *Debriefing Questionnaire*.

## APPENDIX F - DEBRIEFING QUESTIONNAIRE

1. How would you rate your performance anxiety today?

Extremely Low = 1 Somewhat Low = 2 Low = 3 High = 4 Somewhat High = 5

Extremely High = 6

(1a) At what point today was your performance anxiety the highest?

(1b) At what point was your performance anxiety the lowest?

(1c) How would you relate your performance anxiety when working with the horse to counseling new or existing clients?

(2) At what point was your performance anxiety highest during the semester?

(2a) At what point was your performance anxiety lowest during the semester?

(2b) How would you relate your performance anxiety when working with the horse to performance anxiety during the semester?

3. How would you rate your confidence today?

Extremely Low = 1 Somewhat Low =2 Low = 3 High = 4 Somewhat High = 5

Extremely High = 6

4. How would rate your confidence in working with the horses?

Extremely Low = 1 Somewhat Low = 2 Low = 3 High = 4 Somewhat High = 5

Extremely High = 6

5. How would you relate what you experienced today to your role as a new counselor?

6. What did you learn about yourself today as a counselor-in-training?

7. What did you learn about how you handle performance anxiety in new situations?

8. If you could take away one thing from this experience, what would it be?

9. Would you be willing to complete a follow-up survey next semester relating to this study? If so, where should I send the follow-up survey?

## APPENDIX G – COUNSELING SELF-ESTIMATE INVENTORY

*Please respond in a way that reflects your actual estimate of how you will perform as a therapist at the* present time. Please respond to the items as honestly as you can so as to most accurately portray how you think you will behave as a therapist.

| | Strong Disagree | Some Disagree | Little Disagree | Little Agree | Some Agree | Strong Agree |
|---|---|---|---|---|---|---|
| 1. When using responses like reflection of feeling, active listening, clarifying, and probing, I am confident I will be concise and to the point. | | | | | | |
| 2. I am likely to impose my values on the client during the interview. | | | | | | |
| 3. When I initiate the end of a session, I am positive it will be in a manner that is not abrupt or brusque and that I will end the session on time. | | | | | | |
| 4. I am confident that I will respond appropriately to the client in view of what the client will express (e.g. my questions will be meaningful and not concerned with trivia and minutiae). | | | | | | |
| 5. I am certain that my interpretation and confrontation responses will be concise and to the point. | | | | | | |
| 6. I am worried that the wording of my responses like reflection and feeling, clarification, and probing, may be confusing and hard to understand. | | | | | | |
| 7. I feel that I will not be able to respond to the client in anon-judgmental way with respect to the client's | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| values, beliefs, etc. | | | | | | |
| 8. I feel I will respond to the client in an appropriate length of time (neither interrupting the client nor waiting too long to respond). | | | | | | |
| 9. I am worried that the type of responses I use at particular time, i.e. reflection of feeling, interpretation, etc., may not be the appropriate response. | | | | | | |
| 10. I am sure that the content of my responses, i.e. reflection of feeling, clarifying, and probing, will be consistent with and not discrepant from what the client is saying. | | | | | | |

| | Strong Disagree | Some Disagree | Little Disagree | Little Agree | Some Agree | Strong Agree |
|---|---|---|---|---|---|---|
| 11. I feel confident that I will appear confident and earn the respect of my client. | | | | | | |
| 12. I am confident that my interpretation and confrontation responses will be effective in that they will be validated by the client's immediate response. | | | | | | |
| 13. I feel confident that I have resolved conflicts in my personal life so that they will not interfere with my therapy abilities. | | | | | | |
| 14. I feel that the content of my interpretation and confrontation responses will be consistent with and not discrepant from what the client is saying. | | | | | | |
| 15. I feel that I have enough fundamental knowledge to do effective psychotherapy. | | | | | | |
| 16. I may not be able to maintain the intensity and energy level needed to produce client confidence and active participation. | | | | | | |
| 17. I am confident that the wording of my interpretation and confrontation responses will be clear and easy to understand. | | | | | | |
| 18. I am not sure that in a therapeutic relationship I will express myself in a way that is natural without deliberating over every response or action. | | | | | | |
| 19. I am afraid that I may not understand and properly determine probable meanings of the client's nonverbal behaviour. | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 20. I am confident that I will know when to use open or close ended probes, and that these probes will reflect the concerns of the client and not to be trivial. | | | | | | |
| 21. My assessment of client problems may not be as accurate as I would like it to be. | | | | | | |
| 22. I am uncertain as to whether I will be able to appropriately confront and challenge my client in therapy. | | | | | | |
| 23. When giving responses, i.e. reflection of feeling, active listening, clarifying, and probing, I am afraid that they may not be effective in that they won't be validated by the client's immediate response. | | | | | | |

| | Strong Disagree | Some Disagree | Little Disagree | Little Agree | Some Agree | Strong Agree |
|---|---|---|---|---|---|---|
| 24. I don't feel I possess a large enough repertoire of techniques to deal with the different problems my clients may present. | | | | | | |
| 25. I feel competent regarding my abilities to deal with crisis situations which may arise during the therapy sessions - e.g. suicide, alcoholism, abuse, etc. | | | | | | |
| 26. I am uncomfortable about dealing with clients who appear unmotivated to work toward mutually determined goals. | | | | | | |
| 27. I may have difficulty dealing with clients who don't verbalize their thoughts during the therapy session. | | | | | | |
| 28. I am unsure as to how to deal with clients who appear noncommittal and indecisive. | | | | | | |
| 29. When working with ethnic minority clients, I am confident that I will be able to bridge cultural differences in the therapy process. | | | | | | |
| 30. I will be an effective therapist with clients on different social class. | | | | | | |
| 31. I am worried that my interpretation and confrontation responses may not over time assist the client to be more specific in defining and clarifying the problem. | | | | | | |
| 32. I am confident that I will be able to conceptualize my client's problems. | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 33. I am unsure as to how I will lead my client toward the development and selection of concrete goals to work toward. | | | | | | |
| 34. I am confident that I can assess my client's readiness and commitment to change. | | | | | | |
| 35. I feel I may give advice. | | | | | | |
| 36. In working with culturally different clients I may have a difficult time viewing situations from their perspective. | | | | | | |
| 37. I am afraid that I may not be able to effectively relate to someone of lower socioeconomic status than me. | | | | | | |

## APPENDIX H – STATE TRAIT ANXIETY INVENTORY

### STAI Form Y-1

### DIRECTIONS

A number of statements which people have used to describe themselves are given below. Read each statement and then circle the appropriate number to the right of the statement to indicate how you feel *right* now, that is, *at this moment.* There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe your present feelings best.

**1 = Almost Never  2 = Sometimes  3 = Often  4 = Almost Always**

1. I feel calm.
2. I feel secure.
3. I am tense.
4. I feel strained.
5. I feel at ease.
6. I feel upset.
7. I am presently worrying over possible misfortunes.
8. I feel satisfied.
9. I feel frightened.
10. I feel comfortable.
11. I feel self-confident.
12. I feel nervous.
13. I am jittery.

14. I feel indecisive.

15. I am relaxed.

16. I feel content.

17. I am worried.

18. I feel confused.

19. I feel steady.

20. I feel pleasant.

**STAI Form Y-2**

**DIRECTIONS**

A number of statements which people have used to describe themselves are given below. Read each statement and then circle the appropriate number to the right of the statement to indicate how you *generally* feel. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe how you generally feel.

**1 = Almost Never  2 = Sometimes  3 = Often  4 = Almost Always**

1.  I feel pleasant

2. I feel nervous and restless

3. I feel satisfied with myself

4. I wish I could be as happy as others seem to be

5. I feel like a failure

6. I feel rested

7. I am "calm, cool, and collected"

8. I feel that difficulties are piling up so that I cannot overcome them

9. I worry too much over something that really doesn't matter

10. I am happy

11. I have disturbing thoughts

12. I lack self-confidence.

13. I feel secure

14. I make decisions easily

15. I feel inadequate.

16. I am content

17. Some unimportant thought runs through my mind and bothers me

18. I take disappointments so keenly that I can't put them out of my mind

19. I am a steady person.

20. I get in a state of tension or turmoil as I think over my recent concerns and interests

## APPENDIX I – SUPERVISORY WORKING ALLIANCE-T

Supervisory Working Alliance Inventory: Trainee Form

Instructions: Please indicate the frequency with which the behavior described in each of the following items seems characteristic of your work with your supervisee. After each item, check (X) the space over the number corresponding to the appropriate point of the following seven-point scale: Almost - Almost Never – Always

1. I feel comfortable working with my supervisor. ___ ___ ___ ___ ___ ___ ___

1 2 3 4 5 6 7

2. My supervisor welcomes my explanations about the client's behavior.

___ ___ ___ ___ ___ ___ ___

1 2 3 4 5 6 7

3. My supervisor makes the effort to understand me. ___ ___ ___ ___ ___ ___ ___

1 2 3 4 5 6 7

4. My supervisor encourages me to talk about my work with clients in ways that are comfortable for me.

___ ___ ___ ___ ___ ___ ___

1 2 3 4 5 6 7

5. My supervisor is tactful when commenting about my performance.

___ ___ ___ ___ ___ ___ ___

1 2 3 4 5 6 7

6. My supervisor encourages me to formulate my own interventions with the client.

___ ___ ___ ___ ___ ___ ___

1 2 3 4 5 6 7

7. My supervisor helps me talk freely in our sessions. ___ ___ ___ ___ ___ ___ ___

1 2 3 4 5 6 7

8. My supervisor stays in tune with me during supervision. ___ ___ ___ ___ ___ ___ ___

1 2 3 4 5 6 7

9. I understand client behavior and treatment technique similar to the way my supervisor does

. ___ ___ ___ ___ ___ ___ ___

1 2 3 4 5 6 7

10. I feel free to mention to my supervisor any troublesome feelings I might have about him/her.

___ ___ ___ ___ ___ ___ ___

1 2 3 4 5 6 7

11. My supervisor treats me like a colleague in our supervisory sessions.

___ ___ ___ ___ ___ ___ ___

1 2 3 4 5 6 7

12. In supervision, I am more curious than anxious when discussing my difficulties with clients.

___ ___ ___ ___ ___ ___ ___

1 2 3 4 5 6 7

13. In supervision, my supervisor places a high priority on our understanding the client's perspective. ___ ___ ___ ___ ___ ___ ___

1 2 3 4 5 6 7

14. My supervisor encourages me to take time to understand what the client is saying and doing.

___ ___ ___ ___ ___ ___ ___

1 2 3 4 5 6 7

15. My supervisor's style is to carefully and systematically consider the material I bring to supervision.

___ ___ ___ ___ ___ ___ ___

1 2 3 4 5 6 7

16. When correcting my errors with a client, my supervisor offers alternative ways of intervening with that client.

___ ___ ___ ___ ___ ___ ___

1 2 3 4 5 6 7

17. My supervisor helps me work within a specific treatment plan with my clients.

___ ___ ___ ___ ___ ___ ___

1 2 3 4 5 6 7

18. My supervisor helps me stay on track during our meetings.

___ ___ ___ ___ ___ ___ ___

1 2 3 4 5 6 7

19. I work with my supervisor on specific goals in the supervisory session

.

___ ___ ___ ___ ___ ___ ___

1 2 3 4 5 6 7

## APPENDIX J –CURRICULUM VITAE


# Cheryl M. Meola

Greenville, NC 27858

508-971-2668

Meolac14@students.ecu.edu


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## Education

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**Ph.D. (in progress) in Rehabilitation Counseling and Administration** *December 2017*

**Department of Addictions and Rehabilitation Counseling**

*East Carolina University*

**Master's in Counseling, M.Ed.**

**Department of Mental Health Counseling** *May 2011*

*Bridgewater State University*

**Bachelors in Finance and Operations Management, BBA**

**Isenberg School of Management** *May 2003*

*University of Massachusetts, Amherst*

Graduated with Honors

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## Clinical Experience

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**Clinician, Private Practice**

***SMEG Family Mental Health, Winterville, NC***

***Mane Source Counseling, LLC, Greenville, NC*** *2017*

- Provided individual and family counseling to children and adults.
- Provide Equine Assisted Psychotherapy as an augmentative service for clients.
- Completed all the necessary steps in starting up a private equine psychotherapy practice, including paneling with insurance agencies.

**PhD Graduate Assistant at East Carolina University**

***Department of Addictions and Rehabilitation Counseling, Greenville, NC*** *2015-2016*

- Provided counseling services for 30+ adults suffering from substance abuse, anxiety, depression, and co-occurring disorders including veterans and military families.
- Performed outreach activities to homeless veterans as part of Operation Recovery North Carolina.
- Coordinated the Navigate Counseling Clinic.
- Performed clinical research and program evaluation at Navigate Counseling Clinic.
- Supervised over 15 master's level counseling students during their practicum.

**College Counselor**

***Center for Student Development and Counseling***

***East Carolina University, Greenville, NC*** *2017-present*

- Counseled 30+ undergraduate students referred for substance abuse violations on campus.
- Utilized motivational interviewing as part of BASICS training and counseling.

**Licensed Clinical Therapist (LMHC)**

***Child and Family Services, New Bedford, MA*** *2010-2014*

- Counseled 200+ clients from ages 3 to 80 from diverse backgrounds, including children, adolescents, adults, families and groups, school based and clinic based.

- Developed curriculum and facilitated Parenting Skills Enhancement and Parenting Difficult Children groups.
- Collaborated with all providers on client's needs, including school personnel, case workers, and other mental health providers working with client and family.
- Implemented a curriculum and ran weekly social skills groups for elementary age and middle school age clients.
- Coordinated client care with school personnel, attended IEP meetings, and worked as educational advocate for clients.

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## Supervision

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**Doctoral level Supervisor**

*Department of Addictions and Rehabilitation Studies, NC* *2015-2017*

- Supervised 15+ masters level counseling students during their practicum course in individual and dyadic sessions in substance use, clinical mental health, and vocational counseling sites.
- Evaluated students at midterm and end of semester.
- Provided continuing education workshop for site supervisors on "Working with Resistant Supervisees."

- Planning a continuing education workshop for site supervisors at Rocking Horse Ranch on "Experiential Exercises in Working with Resistant Supervisees."

## Teaching Experience

**Teaching Assistant**

***East Carolina University***

- Master's level Pre-practicum (Skills) *Spring 2017*
- Master's level Human Growth and Development (Hybrid) *Spring 2016-Spring 2017*
- Master's level Introduction to Counseling (Hybrid) *Summer 2016-Fall 2017*
- Undergraduate level Interviewing Skills for Rehabilitation Professionals (Skills) *Fall 2015*
- Masters level Group Therapy (Experiential Skills) *Summer 2015*
- Masters level Ethics (Hybrid) *Summer 2015*

**Duties included:**

- Co-teaching pre-practicum skills course at masters and undergraduate level.
- Preparing all lectures, slides, discussions, and course materials for 2 masters level courses.
- Guest lecturing in Ethics, Human Growth and Development, Community Resources, and Introduction to Clinical Counseling.
- Facilitating in-class group learning experiences in above classes.
- Co-facilitating an experiential master's level Group Therapy course and Pre-Practicum skills course.
- Co-teaching, lecturing and facilitating group learning activities in Interviewing Techniques for the Rehabilitation Field for undergraduates.

## Research Experience

**Research Assistant** *Jan 2015-present*

***East Carolina University***

- Facilitated research teams as head student researcher with duties including designing research studies, Qualtrics surveys, analyzing data, coordinating 5 person team and writing up research for publication.
- Assisted in writing and applying for $100,000 Horses and Human Research Foundation grant and various smaller grants up to $5000.
- Established the first community grant of $7500 to start up an Equine Service for Heroes program at Rocking Horse Ranch.
- Assisted in constructing database in Access to clean up five years of data collected in the department clinic for greater accessibility for research.
- Analyzed data collected in counseling clinic with SPSS.
- Designed a quantitative study looking at the efficacy of an equine assisted learning intervention on masters counseling students.
- Planned clinical trial of equine assisted learning intervention.

## Equine Assisted Therapy Experience and Equestrian Experience

**Equine Assisted Learning Facilitator**

***Various Locations in Massachusetts*** *2000-2014*

***Rocking Horse Ranch, Greenville, NC*** *2014-present*

- Designed and founded a PATH Equine Service for Heroes program.

- Obtained grant money for starting a veterans program.
- Worked with Wounded Warriors to provide an equine experience for participants.
- Co-created Building Bridges, a collaboration between Pitt County Sheriff's Office, Rocking Horse Ranch, and East Carolina University to provide an intervention with miniature therapy horses to assist in creating positive ties between witnesses of violence and the Pitt County Deputies.

**Equine Specialist**

***Heart's Desire Stables, Rochester, MA*** *2009-2014*

- Performed equine specialist role at continuing education workshops for mental health professionals in the equine therapy field.
- Certified PATH (Professional Association of Therapeutic Riding) registered therapeutic horsemanship instructor for 11 years.

**Coach, Riding Instructor, Manager** *1997-2014*

- Experienced riding instructor of all ages (4-65).
- Organized marketing, employees, finances, and all other aspects of small business.
- Recruited, fundraised, and coached two intercollegiate equestrian teams.

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## Publications and Presentations

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### Publications

Sherman, S., Meola, C., Eischens, P., Bethune-Scroggs, L., & Leierer, S. (2017). Factors Influencing State-Federal Vocational Rehabilitation Agency Consumers. *Journal of Rehabilitation Counseling*, Date TBA.

Meola, C & Sias, S. (2016). Equine Assisted Practicum in Counselor Supervision. *Vistas 2016.* Retrieved from www.counseling.org/knowledge-center/vistas.

Meola, C (2016). Addressing the Needs of the Millennial Workforce through Equine Assisted Learning. *Journal of Management Development, 35(3).*

Meola, C. & Goodwin, L. (2016). Equine assisted learning assists veterans with civilian employment. *Vistas 2016.* Retrieved from www.counseling.org/knowledge-center/vistas.

Meola, C. (2015-2016). Various publications as editor of the Around Campus section of North Carolina Counseling Association *Carolina Counselor* online newsletter.

Meola, C. (2017). The Impact of Equine Assisted Learning on Counselor Self-Efficacy. STRIDES Magazine, Pending publication.

Sherman, S., Meola, C., Eischens, P., Bethune-Scroggs, L., & Leieirer, S. (2017). Factors Influencing State-Federal Vocational Rehabilitation Agency Consumers. *Journal of Rehabiliation*, Date TBA.

**Presentations**

Meola, C. (2017). Equine Assisted Learning as a Supervision Intervention for Counselors. PATH International Conference, Seminar, San Antonio, TX.

Meola, C. (2017). The Impact of Equine Assisted Learning on Counselor Self-Efficacy. ACC American Creativity in Counseling National Conference, Round Table Meeting, Clearwater, FL.

Meola, C. (2017). Addressing Barriers to Wellness in Counselors-in-Training with Equine Assisted Learning. ACA American Counseling Association Annual Conference, Poster Presentation, San Francisco, CA.

Meola, C., Sanders, M., Atherton, W., and Toriello, P. (2017). Effectiveness of a mobile clinic for homeless veterans on psychological health and well-being. Research and Creativity Week, East Carolina University, Poster Presentation and Contest, Greenville, North Carolina.

Meola, C., Atherton, W., & Atherton, T. (2017). The Integration of Animal Assisted Therapy within Clinical Counseling. North Carolina Counseling Association Annual Conference, Durham, NC.

Meola, C, Hinton, Q, & Sias, S. (2016). Equine Assisted Learning Assists Veterans with Civilian Employment, AMHCA American Mental Health Counselors Association Annual Conference, Poster Presentation, New Orleans, LA.

Meola, C., Cudney, K. (2016). Horses for Health: An Introduction to Equine Assisted Activities and Program. State of the Art Conference, New Bern, NC.

Meola, C., Hinton, Q., & Atherton, L. (2016). The Fundamentals of Clinical Supervision in Addictions and Rehabilitation Counseling. Professional Association of Rehabilitation Counselors National Conference.

Meola, C. (2016). Fundamentals of Clinical Supervision for Site Supervisors. Site Supervisors Meeting, Greenville, NC. Meola, C., Cudney, K. (2015) Horses for Health: An Introduction to Equine Assisted Activities and Program. State of the Art Conference, Greenville, NC.

## Guest Lectures

*Guest Lecturer* at Oakwood School- Alternative Jobs in the Mental Health Field: Equine Facilitated Psychotherapy presentation and experiential activity, January 2017.

*Guest Lecturer* in Community Resources: "Horses for Health: An Introduction to Equine Assisted Activities and Program," January 2017, September 2016, and February 2016.

*Guest Student Speaker* at Dean Summer Retreat Luncheon, July 6, 2016.

*Guest Lecturer* in Introduction to Counseling Theories: "Outcome Based Research," June, 2016.

*Guest Lecturer* in Introduction to Counseling Theories: "Supervisory Working Alliance," June, 2016.

*Guest Lecturer* in Interviewing Skills for Rehabilitation Counselors, Greenville, NC: "Mindfulness and Reiki," March 2016 and November 2015.

*Guest Lecturer* in Introduction to Rehabilitation Studies, Greenville, NC: "Equine Assisted Learning and Psychotherapy: An Introduction and Case Study of Rocking Horse Ranch," November 2015.

*Guest Lecturer* in Introduction to Counseling Theories: "Equine Assisted Psychotherapy," July 21, 2015.

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**Awards** American Counseling Association Doctoral Ethics Competition, 2017 3rd place team

Equine Facilitated Practitioner of the Year, 2015, Professional Association of Therapeutic Horsemanship, International (PATH)

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**Certifications**

**And Special Training** Licensed Professional Counselor (LPC) (2014)

Licensed Mental Health Counselor, MA (2013)

National Certified Counselor (NCC) (2011)

PATH International Certified Registered Instructor (2004)

USEA ICP Instructor Levels I and II (2004)

First Aid and CPR (2017)

Reiki Certified, Level II (2016)

Doctoral Level Course in Supervision

Doctoral Level Course in Pedagogy

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**Community Service And Volunteer Positions**

Peer Editor of Journal of Management Development

North Carolina Counseling Association, Around Campus Editor

Professional Association of Rehabilitation Counselors Board

Volunteer, Rocking Horse Ranch Wounded Warriors Project

# APPENDIX K – IRB LETTER

**EAST CAROLINA UNIVERSITY**
**University & Medical Center Institutional Review Board Office**
4N-70 Brody Medical Sciences Building· Mail Stop 682
600 Moye Boulevard · Greenville, NC 27834
Office **252-744-2914** · Fax **252-744-2284** · **www.ecu.edu/ORIC/irb**

## Notification of Initial Approval: Expedited

From: Social/Behavioral IRB
To: Cheryl Meola
CC:
Shari Sias

Date: 8/7/2017
Re: UMCIRB 17-000227
Equine Assisted Learning Supervision for Counselors-in-Training

I am pleased to inform you that your Expedited Application was approved. Approval of the study and any consent form(s) is for the period of 8/7/2017 to 8/6/2018. The research study is eligible for review under expedited category #7. The Chairperson (or designee) deemed this study no more than minimal risk.

Changes to this approved research may not be initiated without UMCIRB review except when necessary to eliminate an apparent immediate hazard to the participant. All unanticipated problems involving risks to participants and others must be promptly reported to the UMCIRB. The investigator must submit a continuing review/closure application to the UMCIRB prior to the date of study expiration. The Investigator must adhere to all reporting requirements for this study.

Approved consent documents with the IRB approval date stamped on the document should be used to consent participants (consent documents with the IRB approval date stamp are found under the Documents tab in the study workspace).

The approval includes the following items:

| Name | Description |
|---|---|
| APPENDIX C - PARTICIPANT REGISTRATION AND RELEASE ROCKING HORSE RANCH | Additional Items |
| APPENDIX D - PARTICIPANT SAFETY SCRIPT | Additional Items |
| CONSENT TO PARTICIPATE.docx | Consent Forms |
| COSE.pdf | Surveys and Questionnaires |
| DEBRIEFING QUESTIONNAIRE.docx | Surveys and Questionnaires |
| Demographic Questionnaire | Data Collection Sheet |
| DEMOGRAPHIC QUESTIONNAIRE.docx | Surveys and Questionnaires |
| Proposal IRB.docx | Study Protocol or Grant Application |

| | |
|---|---|
| STAI-ST.pdf | Surveys and Questionnaires |
| Supervisory-Working-Alliance-Inventory_Trainee.pdf | Surveys and Questionnaires |

The Chairperson (or designee) does not have a potential for conflict of interest on this study.

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